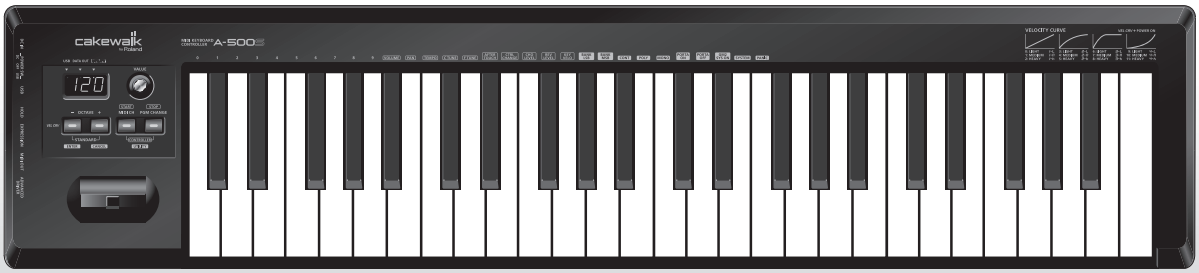
cakewalk by Roland



A-500S

MIDI KEYBOARD CONTROLLER

Owner's Manual

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (p. 3; p. 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

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USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⃠symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ●symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Do not open (or modify in any way) the unit or its AC adaptor.

- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information."

- Never install the unit in any of the following locations.
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Exposed to steam or smoke; or are
  - Subject to salt exposure; or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty or sandy; or are
  - Subject to high levels of vibration and shakiness.

- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!

⚠WARNING

- Use only the specified AC adaptor (PSA series), and make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.

- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information" when:
  - The AC adaptor or the power-supply cord has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

⚠WARNING

- Protect the unit from strong impact. (Do not drop it!)

- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information."

- Batteries must never be recharged, heated, taken apart, or thrown into fire or water.

- DO NOT play a CD-ROM or DVD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.

- Never expose battery to excessive heat such as sunshine, fire or the like.

⚠CAUTION

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.

- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.

- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.

⚠CAUTION

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, nor place heavy objects on the unit.

- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.

- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet.

- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.

- If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions (p. 12).

  - Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.

  - Avoid using new batteries together with used ones. In addition, avoid mixing different types of batteries.

  - Remove the batteries whenever the unit is to remain unused for an extended period of time.
  - If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge gets onto your hands or skin. Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.
  - Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.

- Used batteries must be disposed of in compliance with whatever regulations for their safe disposal that may be observed in the region in which you live.

IMPORTANT NOTES

Power Supply: Use of Batteries

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- The use of an AC adaptor is recommended as the unit's power consumption is relatively high. Should you prefer to use batteries, please use the alkaline type.
- When installing or replacing batteries, always turn off the power on this unit and disconnect any other devices you may have connected. This way, you can prevent malfunction and/or damage to speakers or other devices.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.
- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.
  You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

* Microsoft, Windows and Windows Vista are registered trademarks of Microsoft Corporation.
* The screen shots in this document are used in compliance with the guidelines of the Microsoft Corporation.
* Windows® is known officially as: "Microsoft® Windows® operating system."
* Apple, Macintosh and Mac OS are registered trademarks of Apple Inc.
* Cakewalk is a registered trademark of Cakewalk, Inc.
* MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.
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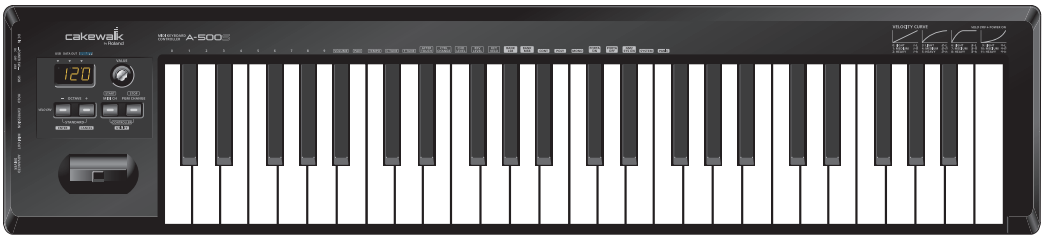
Contents of the Package

The A-500S includes the following items. When you open the package, first make sure that all items are included. If any are missing, contact the dealer where you purchased the A-500S.

MIDI keyboard controller A-500S



USB cable

Use this cable to connect the A-500S to the USB connector of your computer. For details on connections, refer to **"Driver Installation and Settings"** (p. 13).

* Please use only the included USB cable. If you require a replacement due to loss or damage, please contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information."

CD-ROM, DVD-ROM (one each)

A-500S CD-ROM

This contains the A-500S drivers.

Cakewalk Production Plus Pack DVD-ROM

Cakewalk Production Plus Pack, packed with a lavish array of high-quality music production tools, is included.

* Avoid touching or scratching the shiny underside (encoded surface) of the disc. Damaged or dirty discs may not be read properly. Keep your discs clean using a commercially available CD cleaner.

⚠WARNING

DO NOT play a CD-ROM or DVD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.

Owner's manual

This is the document you're reading. Keep it at hand for reference when needed.

Cakewalk Production Plus Pack installation guide

This explains the installation and user registration process for the software included on the Cakewalk Production Plus Pack DVD-ROM. Unless you complete the user registration and obtain a registration code as directed in this guide, you won't be able to use the software for more than thirty days after installation.

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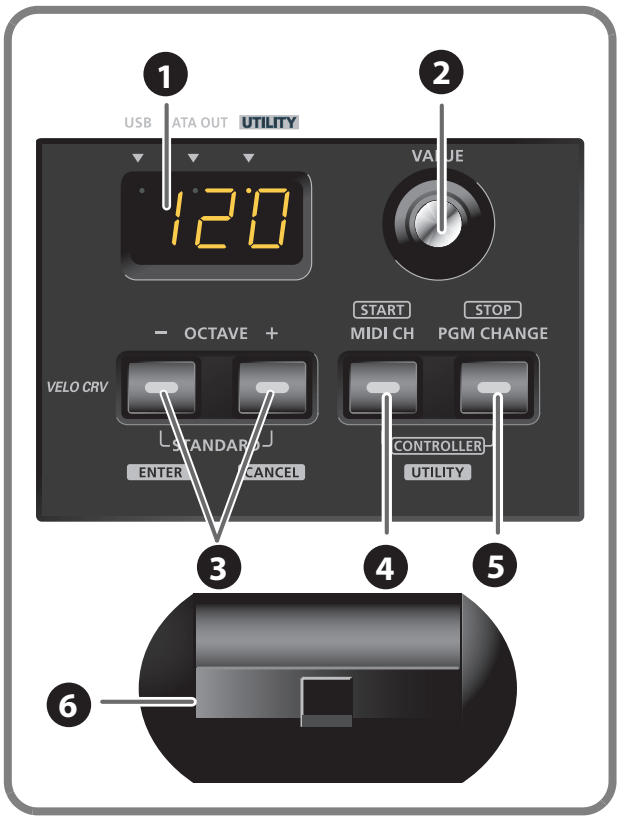
Names of Things and What They Do

You must install the driver before you connect the A-500S to your computer for the first time.
Install the driver as described in **"Driver Installation and Settings"** (p. 13).

Panel



* If you do not operate or play the A-500S for a certain length of time, the display and buttons will automatically dim.

1 Display

Indicates the current status and various other information.

Number	Operating a controller will cause its current value to appear in the display for a time.
USB	Lights if the A-500S is connected to your computer via USB.
DATA OUT	This will blink when MIDI messages are transmitted via USB or MIDI OUT.
UTILITY	This will blink in **UTILITY mode** (p. 28).

2 VALUE knob

Use this knob to specify the MIDI transmit channel or the program change number. In **CONTROLLER mode** (p. 36), this knob controls the parameter you specify (p. 46).

Turning the encoder specifies the value.

3 OCTAVE [-] [+] button

Press **OCTAVE [-] [+]** button to shift the pitch of the keyboard up or down in steps of an octave.

When not in **PLAY mode** (p. 27), use these buttons to return to confirm setting item (the **[ENTER]** button) or to cancel the setting and return to PLAY mode (the **[CANCEL]** button).

4 [MIDI CH] button

Specifies the transmission channel **"Current channel"** (p. 31) for the keyboard and bender.

In **CONTROLLER mode** (p. 36) this transmits a Start message (FAh).

5 [PGM CHANGE] button

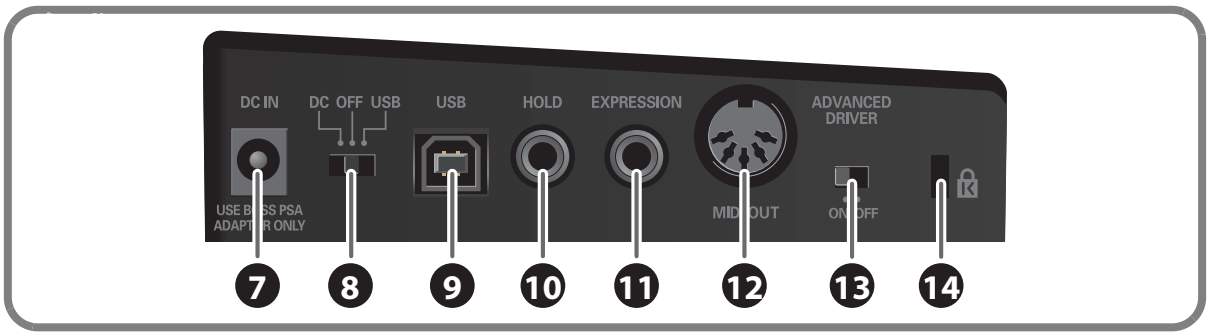
Transmits program change messages on the current channel.

In **CONTROLLER mode** (p. 36) this transmits a Stop message (FCh).

6 Pitch Bend/Modulation lever

This lever can be used to modify the pitch or apply vibrato.

Side panel



❼ AC adaptor jack

Connect the AC adaptor (PSA series; sold separately) to this jack. Insert the plug firmly so it won't get unplugged accidentally.

❽ Power switch

DC	Power-on status when using the AC adaptor or batteries * If the AC adaptor is connected and batteries are inserted, the power supplied by the AC adaptor is used. If you disconnect the AC adaptor, the power supplied by the batteries is used.
OFF	Power is off
USB	Power on using a USB cable (when not using the AC adaptor) * USB (=BUS power) can be used when the A-500S is connected to your computer via a USB cable. In this case, the power will be supplied from your computer via the USB cable. To use the A-500S with bus power, set the power switch to USB. * For some computers, the A-500S may not operate if bus power is used. In this case, use the AC adaptor (sold separately) or batteries.

❾ USB connector

Use this when connecting the A-500S to your computer via a USB cable.

❿ HOLD jack

Connect a pedal switch to this jack and use it as a hold pedal.

⓫ EXPRESSION jack

Connect an expression pedal to this jack and use it to control tone or volume in real time.

⓬ MIDI OUT connector

This can be connected to the MIDI connector of other MIDI devices to transmit MIDI messages.

⓭ [ADVANCED DRIVER] switch

This switches the operating mode between Advanced mode and Standard driver mode.
Normally, you should use Advanced mode (ON).

ON (Advanced mode)	This mode utilizes the A-500S's special, advanced MIDI driver. This advanced driver uses *FPT technology for rapid, high-performance MIDI transmissions.
OFF (Standard driver mode)	This mode uses the standard MIDI driver included with the OS. Use this if you do not have the special driver installed. This setting can be used only when running Windows XP.

* FPT=Fast Processing Technology of MIDI Transmission

⓮ Security slot (🔒)

http://www.kensington.com/

Inserting batteries

* If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions.
  - Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.
  - Avoid using new batteries together with used ones. In addition, avoid mixing different types of batteries.
  - Remove the batteries whenever the unit is to remain unused for an extended period of time.
  - If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge gets onto your hands or skin. Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.
  - Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.

1. Make sure that the power switch is turned off.

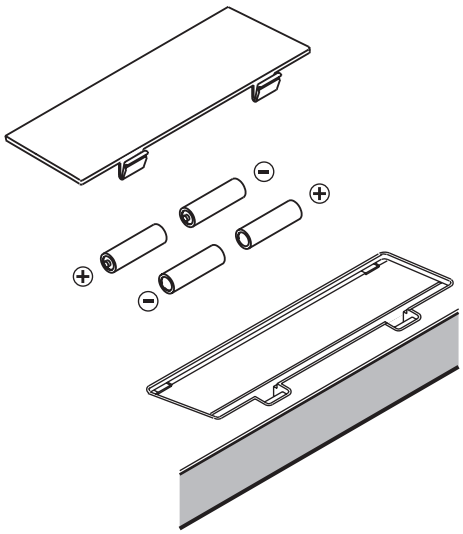
2. Remove the battery cover located on the rear panel of the A-500S.

* When turning the unit upside-down, get a bunch of newspapers or magazines, and place them under the four corners or at both ends to prevent damage to the buttons and controls. Also, you should try to orient the unit so no buttons or controls get damaged.
* When turning the unit upside-down, handle with care to avoid dropping it, or allowing it to fall or tip over.

3. Insert four AA batteries into the battery compartment, making sure to observe the correct polarity (+/-).

* Use alkaline batteries.
* Do not mix new batteries with partially used batteries, and do not mix batteries of differing types.

4. Close the battery cover.



When the batteries run low, the display will indicate “Lo.” When this message appears, replace the batteries as soon as possible.

Driver Installation and Settings

The installation procedure and the settings will differ depending on your system. To perform the installation and make settings, follow the three steps listed below for your system.

	Windows 7/ Windows Vista	Windows XP	Mac OS X
1. Install the driver	p. 14	p. 17	p. 20
2. Input/output device settings	p. 16	p. 19	p. 21

What is a driver?

A driver is software that transfers data between the A-500S and the application software on your computer when the A-500S is connected to your computer.

* If you want to use the A-500S in Standard driver mode, refer to **"About standard driver mode (Windows XP)"** (p. 61).

Windows 7/Windows Vista users

Steps to be performed on the A-500S itself are marked by a **Operation of the A-500S** symbol.
Do not connect the A-500S to your computer until you are directed to do so.

* The example screen shots included here are taken from Windows Vista.

Installing the driver

1. Start up Windows without the A-500S connected.

* Disconnect all USB cables other than those for a USB keyboard and/or USB mouse (if used).

2. Close all currently running software.

3. Insert the included **A-500S CD-ROM** into your CD-ROM drive.

* If the auto-play dialog appears, click **"Open folder to view files."**

4. In the appropriate folder within the **CD-ROM**, double-click the **Setup** icon to start up the installer.

OS	Installer
Windows 7	Open the folders [Driver] and then [Win7]
Windows Vista	Open the folders [Driver] and then [Vista]
Windows 7 64-bit edition	Open the folders [x64Driver] and then [Win7]
Windows Vista 64-bit edition	Open the folders [x64Driver] and then [Vista]

If you get a message saying **"The operating system you are using is not supported"** or **"The version of this file is not compatible with the version of Windows you're running,"** or if you don't know the version of your operating system, check your operating system as described below.

If **System type** indicates **64-bit Operating System**, you have the 64-bit version.

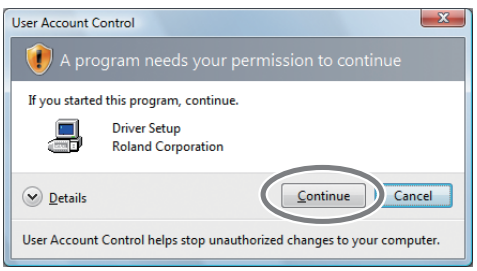
Windows 7 users

Open **Control Panel**, click **System and Security**, and then click **System**.
If the Control Panel shows the icon view, click **System**.

Windows Vista users

Open **Control Panel**, click **System and Maintenance**, and then click **System**.
If the Control Panel shows the classic view, double-click the **System** icon.

5. A confirmation screen regarding user account control will appear.
Click **[Yes]** if you're using Windows 7, or click **[Continue]** if you're using Windows Vista.

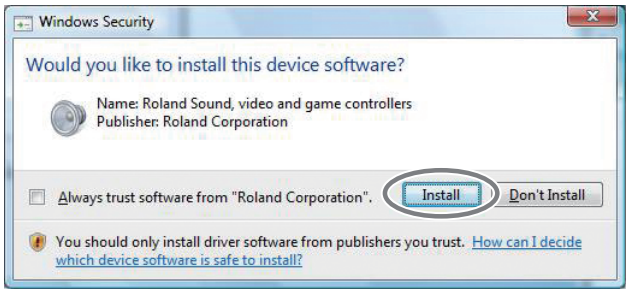


6. The screen will indicate **"A-500S Driver will be installed on your computer."**
Click **[Next]**.

* If any other message appears, proceed as directed by the message.

7. To begin the installation, click **[Next]** once again.
Installation will begin.

If a dialog box related to Windows Security appears, click **[Install]**.


Windows Security
Would you like to install this device software?
Name: Roland Sound, video and game controllers
Publisher: Roland Corporation
Always trust software from "Roland Corporation".
Install
Don't Install
You should only install driver software from publishers you trust. How can I decide which device software is safe to install?

The screen will indicate **"Ready to install the driver."**

* If any other message appears, proceed as directed by the message.

8. Operation of the A-500S Set the A-500S's [ADVANCED DRIVER] switch to the **ON** position.

* If the [ADVANCED DRIVER] switch is set to **OFF**, the installation will not take place as described in the following procedure.

* Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

9. Operation of the A-500S Set the A-500S's power switch to the **OFF** position.

10. Operation of the A-500S Use a USB cable to connect the A-500S to your computer.

11. Operation of the A-500S Set the A-500S's power switch to the **USB** position.

The driver will be installed automatically.

* It can take several minutes for the driver installation to complete.

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

12. When installation has been completed, the **Driver Setup** dialog box will indicate **"Installation has been completed."**
Click **[Close]** to close the **Driver Setup** dialog box.

If the **System Settings Change** dialog box appears, click **[Yes]**. Windows will automatically restart.

Next, you need to set your software so it can use the A-500S.

Input/output device settings

In order to use the A-500S with your software, you'll need to select the A-500S as MIDI input/output device. For details on how to do this, refer to the documentation for your software.

* If you're unable to select the A-500S as the input/output device in your software, it may be that a problem has occurred. Refer to **"Problems with settings"** (p. 65) in the Troubleshooting section.

MIDI output device	A-500S MIDI OUT
MIDI input device	A-500S

* The Windows Media Player included with Windows 7 or Windows Vista cannot use the A-500S's MIDI input/output device.

Caution when recording or playing back with your software

Check the following points before you use the A-500S to record or play back.

- Connect the A-500S to your computer before you start up the software you're using.
- Do not disconnect the A-500S's USB cable from your computer while your software is running. Close the software you're using before you disconnect the A-500S's USB cable from your computer.

This completes driver installation and settings.

Windows XP users

Steps to be performed on the A-500S itself are marked by a **Operation of the A-500S** symbol.
Do not connect the A-500S to your computer until you are directed to do so.

Installing the driver

1. Start up Windows without the A-500S connected.

* Disconnect all USB cables other than those for a USB keyboard and/or USB mouse (if used).

2. Close all currently running software.

3. Insert the included **A-500S CD-ROM** into your CD-ROM drive.

4. On the **CD-ROM**, open the [Driver] folder and then the [XP] folder, and double-click the **Setup** icon.

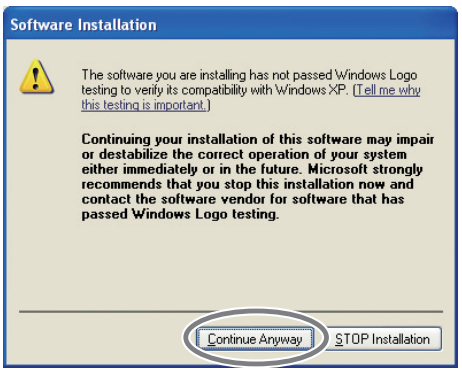
* If you get a message saying "The operating system you are using is not supported" or saying that the application is invalid, check the version of your operating system.

* If the **"Install Program As Other User"** dialog box appears, click **[Cancel]** to terminate the installation, log on to Windows using an administrator account, and perform the installation once again.

5. The screen will indicate **"A-500S Driver will be installed on your computer."** Click **[Next]**.

* If any other message appears, proceed as directed by the message.

6. To begin the installation, click **[Next]**.
If the **Software Installation** dialog box appears, click **[Continue Anyway]** to proceed with the installation.


Software Installation
The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the software vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

* If you are unable to proceed, click **[OK]** to halt the installation, and then change the settings as described in **"Driver signing option settings (Windows XP)"** (p. 54).

The screen will indicate **"Ready to install the driver."**

* If any other message appears, proceed as directed by the message.

7. Operation of the A-500S Set the A-500S's [ADVANCED DRIVER] switch to the **ON** position.

* If the [ADVANCED DRIVER] switch is set to **OFF**, the installation won't take place as described in the following procedure.

* Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

8. Operation of the A-500S Set the A-500S's power switch to the **OFF** position.

9. Operation of the A-500S Use a USB cable to connect the A-500S to your computer.

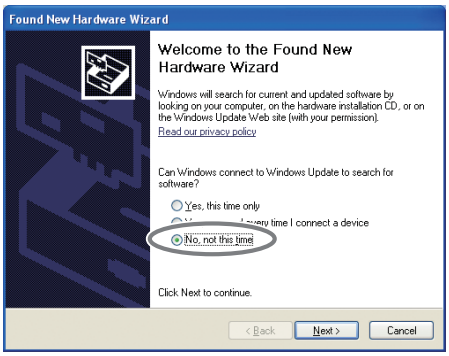
10. Operation of the A-500S Set the A-500S's power switch to the **USB** position.

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

1. The message **"Found New Hardware"** will appear in the lower right corner of the screen, and the **Found New Hardware** Wizard will appear.

* It may take between ten seconds to several minutes until the **Found New Hardware Wizard** appears.

If you are asked whether you want to connect to Windows Update, choose **No** and click **[Next]**.


Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).
Read our privacy policy
Can Windows connect to Windows Update to search for software?
Yes, this time only
No, not this time
Click Next to continue.
< Back
Next >
Cancel

2. Choose **Install the software automatically (Recommended)**, and click **[Next]**.

3. If the **Hardware Installation** dialog box appears, click **[Continue Anyway]** to proceed with the installation.

* If you are unable to proceed, click **[OK]** to halt the installation, and then change the settings as described in **"Driver signing option settings (Windows XP)"** (p. 54).

4. The screen will indicate **"Completing the Found New Hardware Wizard."**
Click **[Finish]**.

11. When installation is complete, the **Driver Setup** dialog box will indicate **"Installation has been completed."**
Click **[Close]** to close the **Driver Setup** dialog box.

If the **System Settings Change** dialog box appears, click **[Yes]** to restart Windows.

Next, you need to set your software so it can use the A-500S.

Input/output device settings

In order to use the A-500S with your software, you must select the A-500S as MIDI input/output device. For details on how to make this setting, refer to the documentation for the software you're using.

* If you're unable to select the A-500S as the input/output device in your software, it may be that a problem has occurred. Refer to **"Problems with settings"** (p. 65) in the Troubleshooting section.

MIDI output device	A-500S MIDI OUT
MIDI input device	A-500S

Settings when using the A-500S in Windows Media Player

Some software, such as Windows Media Player, may use the system default playback/recording device as its MIDI input/output device.

Make the following settings if you want to use an external MIDI sound module connected to the MIDI OUT connector of the A-500S.

1. Open the **Control Panel**, click **Sounds, Speech, and Audio Devices**, and then double-click the **Sounds and Audio Devices.**

* If you're using the Classic view, double-click the **Sounds and Audio Devices** icon.

2. Click the **Audio** tab to open it, and in the **MIDI Music Playback** area, select **A-500S MIDI OUT**.

3. Click **[OK]** to complete the setting.

Caution when recording or playing back with your software

Check the following points before you use the A-500S to record or play back.

- Connect the A-500S to your computer before you start up the software you're using.
- Do not disconnect the A-500S's USB cable from your computer while your software is running. Close the software you're using before you disconnect the A-500S's USB cable from your computer.

This completes driver installation and settings.

Macintosh users

Steps to be performed on the A-500S itself are marked by a **Operation of the A-500S** symbol.
Do not connect the A-500S to your computer until you are directed to do so.

Installing the driver

* If the **Authenticate** dialog box or the dialog that indicates **"Installer requires that you type your password"** appears during the installation, enter your password and click **[OK]**.
* What you actually see on the screen may differ depending on your system.

1. Start up your computer with the A-500S disconnected.

* Disconnect all USB cables other than those for a USB keyboard and/or USB mouse (if used).

2. Close all currently running software.

3. Insert the included **A-500S CD-ROM** into your CD-ROM drive.

4. Double-click one of the following icons on the **CD-ROM** to start up the installer.

OS	Installer
Mac OS X 10.6 or later	[A500S_USBDriver.pkg] (/Driver/10.6)
Mac OS X 10.5 or earlier	[A500SUSBDriver.pkg] (/Driver/10.4_10.5)

A message concerned with checking whether installation is possible may appear. If so, click **[Continue]**.
If a message indicating that installation is not possible appears, check the operating system you're using, and perform step 4.

5. The screen will indicate **"Welcome to the A-500S Driver Installer."**
Click **[Continue]**.

6. If the display indicates **"Select a Destination,"** click your start-up disk to select it, and then click **[Continue]**.

7. The screen will indicate **"Easy Install"** or **"Standard Install."**
Click **[Install]** or **[Upgrade]**.

8. The screen will indicate **"Installing this software requires you to restart your computer when the installation is done."**
Click **[Continue Installation]**.

9. The screen will indicate **"Click Restart to finish installing the software."**
Click the **[Restart]** to restart your computer.

* It may take some time for your Macintosh to restart.
* Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

10. Operation of the A-500S Set the A-500S's power switch to the **OFF** position.

11. Operation of the A-500S When your computer has started up, use a USB cable to connect the A-500S to your computer.
Turn the A-500S's [ADVANCED DRIVER] switch **ON**, and use a USB cable to connect the A-500S to your computer.

12. Operation of the A-500S Set the A-500S's power switch to the **USB** position.

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

Next, you need to set your software so it can use the A-500S.

Input/output device settings

1. In the **Applications** – **Utilities** folder, double-click **Audio MIDI Setup** to start it up.

2. Access the dialog box.

Mac OS X 10.6 or later

From the **Window** menu, choose **Show MIDI Window** to open **MIDI Studio**.

Mac OS X 10.5 or earlier

Click the **MIDI Devices** tab.

3. Verify that the **A-500S** is shown in the **MIDI Studio** or **Audio MIDI Setup** dialog box.

* If the A-500S is not shown, or if it is grayed-out, the A-500S has not been recognized correctly. Try clicking **Rescan MIDI**. You can also try disconnecting and reconnecting the A-500S's USB cable.
* If you've previously installed a different version of the driver, the former settings could still exist. If so, click the grayed-out A-500S to select it, and then click **Remove Device** to delete the settings.

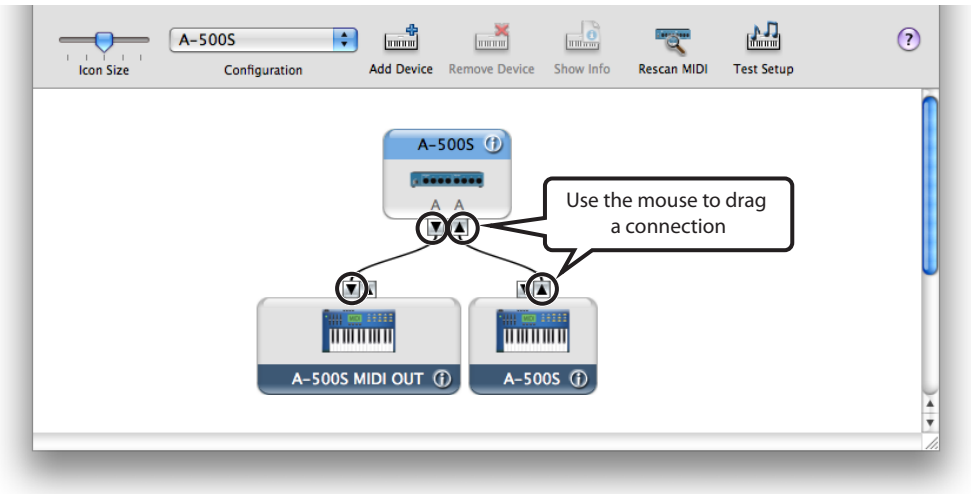
4. Click **Add Device** twice.
Two **new external devices** will appear.

5. Specify the **Device Name** for the **new external device**.

1. Click the **new external device** you added to select it, and then click **Show Info**.
2. In the **Device Name** field, enter a name for the device. Enter the following name for each new external device.

	First	Second
Device Name	A-500S MIDI OUT	A-500S

6. Connect the ▼ and ▲ symbols (which signify the outputs and inputs) of the **A-500S** icon to those of the **new external device** icon by using the mouse to drag between them.



7. Check to make sure that MIDI transmission and reception takes place normally. Proceed as follows.

1. Click **Test Setup**.
2. Try playing the keyboard of the A-500S. If the corresponding port's arrow in the **MIDI Studio** or **Audio MIDI Settings** dialog box blinks, the settings are made correctly.
3. Click **Test Setup** once again to end the test.

8. Close the **MIDI Studio** dialog box or **Audio MIDI Setup** dialog box. This completes the settings.

Caution when recording or playing back with your software

Check the following points before you use the A-500S to record or play back.

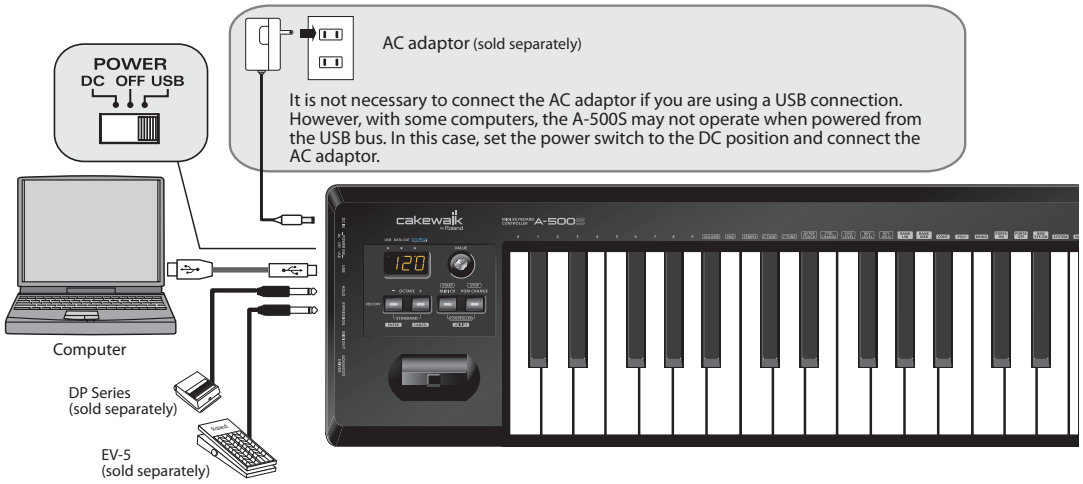
- Connect the A-500S to your Macintosh and turn on the power before you start up your software.
- Do not switch off the power to the A-500S or disconnect the USB cable from your Macintosh while the software is running. Close the software you're using before you disconnect the A-500S's USB cable from your Macintosh.
- The A-500S will not work with the Mac OS X Classic environment. Use the A-500S when the classic environment is not running.

This completes driver installation and settings.

Basic Connections and MIDI Flow

USB connections with your computer—Transmitting MIDI messages to your software

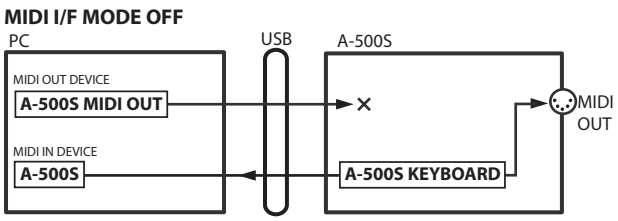
Basic connections


POWER
DC OFF USB
AC adaptor (sold separately)
It is not necessary to connect the AC adaptor if you are using a USB connection. However, with some computers, the A-500S may not operate when powered from the USB bus. In this case, set the power switch to the DC position and connect the AC adaptor.
Computer
DP Series
(sold separately)
EV-5
(sold separately)

* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.
* Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

MIDI flow

* Turn MIDI I/F MODE **OFF** as described in **"MIDI I/F MODE"** (p. 50).

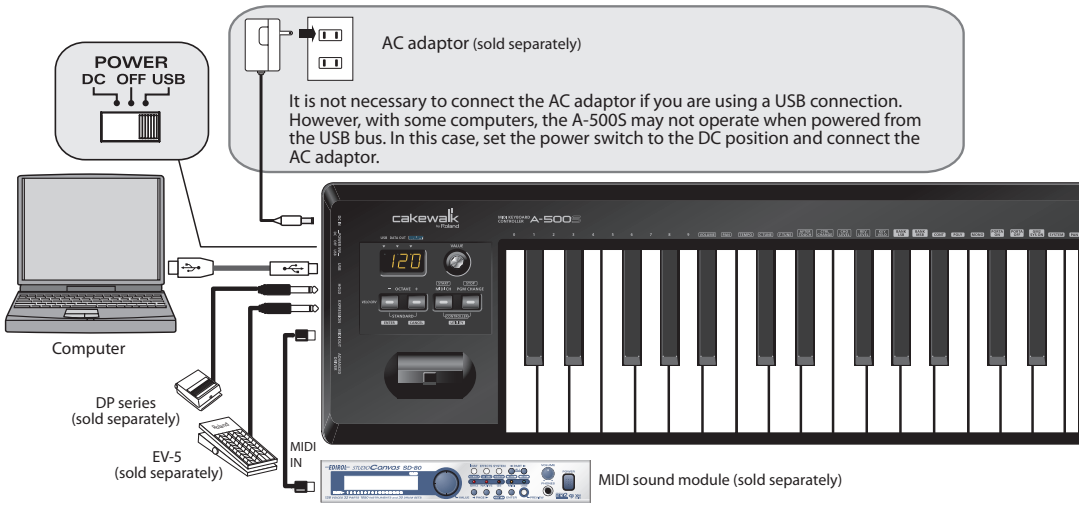


MIDI IN DEVICE A-500S	This port receives messages from the keyboard, Pitch Bend/Modulation lever, and VALUE knob. The port assignment determines how the keyboard, Pitch Bend/Modulation lever, and VALUE knob are mapped to A-500S.
A-500S KEYBOARD	The messages of the keyboard, Pitch Bend/Modulation lever, VALUE knob, hold pedal and expression pedal will be transmitted from here.

USB connections with your computer—Using the A-500S as a MIDI interface

* If you want to use Media Player to play a sound module connected to the A-500S's MIDI OUT connector, make driver settings. → **"Driver Installation and Settings"** (p. 13)

Basic connections

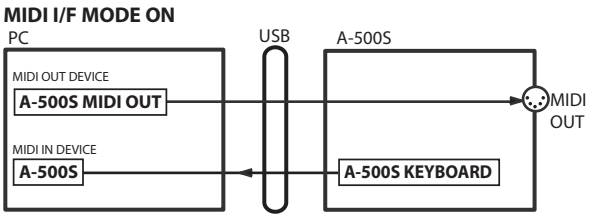

POWER
DC OFF USB
AC adaptor (sold separately)
It is not necessary to connect the AC adaptor if you are using a USB connection. However, with some computers, the A-500S may not operate when powered from the USB bus. In this case, set the power switch to the DC position and connect the AC adaptor.
Computer
DP series
(sold separately)
EV-5
(sold separately)
MIDI
IN
MIDI sound module (sold separately)

* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

* Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

MIDI flow

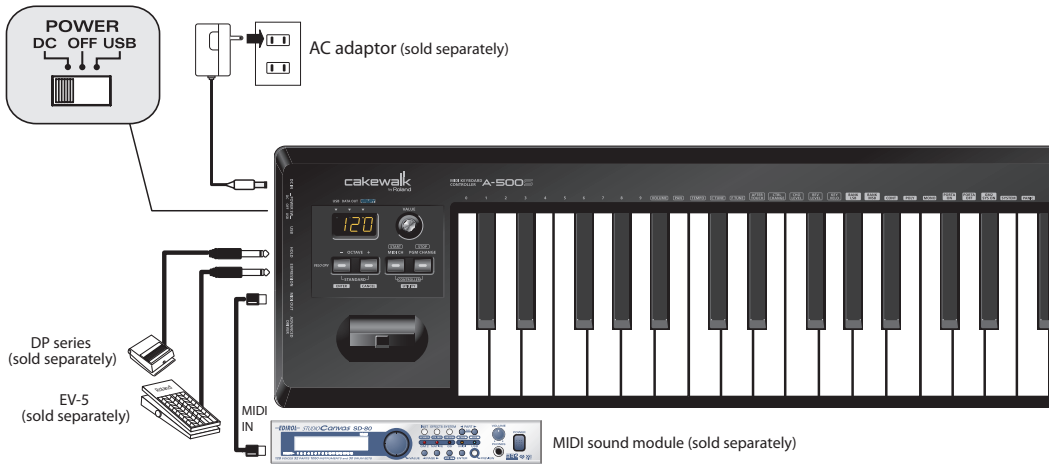
* Turn MIDI I/F MODE **ON** as described in **"MIDI I/F MODE"** (p. 50).



MIDI OUT DEVICE A-500S MIDI OUT	If you specify **A-500S MIDI OUT** as the output port for your sequencer software, messages will be transmitted from the MIDI OUT connector of the A-500S itself. Turn MIDI I/F MODE **ON** as described in **"MIDI I/F MODE"** (p. 50).
MIDI IN DEVICE A-500S	This port receives messages from the keyboard, Pitch Bend/Modulation lever, and VALUE knob. The port assignment determines how the keyboard, Pitch Bend/Modulation lever, and VALUE knob are mapped to A-500S.
A-500S KEYBOARD	The messages of the keyboard, Pitch Bend/Modulation lever, VALUE knob, hold pedal and expression pedal will be transmitted from here.

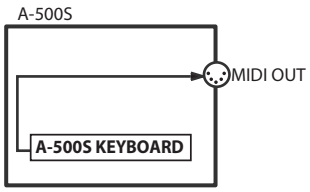
When using a MIDI connection—Transmitting MIDI messages to an external MIDI sound module, etc.

Basic connections



* Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

MIDI flow



A-500S KEYBOARD	The messages of the keyboard, Pitch Bend/Modulation lever, VALUE knob, hold pedal and expression pedal will be transmitted from here.

Use MIDI Functionality

How to switch modes

PLAY mode

PLAY

What is PLAY mode?

This is the mode in which you play the A-500S.

In PLAY mode, playing the keyboard will transmit note messages to play the MIDI device.

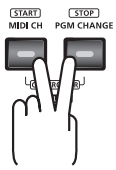
In PLAY mode, you can play the keyboard to produce sound on a connected sound module, and also use various other functions, such as operating the Pitch Bend/Modulation lever to change the pitch of the currently sounding note (Pitch Bend), adding vibrato (Modulation), or switching the octave (Octave Shift).

In this mode you can also specify the MIDI transmit channel, and transmit program changes, parameters, or start/stop messages.

To switch the A-500S to PLAY mode...

When you turn on the power, the A-500S will start up in PLAY mode.

To switch the A-500S to PLAY mode from UTILITY mode (p. 28), simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down or press the **[CANCEL]** button.



- You are returned to PLAY mode once a setting or a process has been completed within the UTILITY mode.
- You will also return to PLAY mode if you cancel an operation within UTILITY mode. In this case, the setting you had been making will be discarded.

Functions in PLAY mode

Play	Transmit MIDI messages by playing the keyboard or operating the Pitch Bend/Modulation lever, VALUE knob, hold pedal and expression pedal.	p. 29
Specify the MIDI transmit channel	Set the transmit channel for the keyboard, Pitch Bend/Modulation lever, VALUE knob, hold pedal and expression pedal.	p. 31
Transmit a program change message	Transmit program change messages by operating the VALUE knob. → For details on transmitting Bank Select, refer to p. 34 and p. 35.	p. 33
Start playback	If you're in CONTROLLER mode (p. 36), pressing [MIDI CH] button will transmit a Start (FAh) message.	p. 37
Stop playback	If you're in CONTROLLER mode (p. 36), pressing [PGM CHANGE] button will transmit a Stop (FCh) message.	p. 38
Transmit the value of a specific parameter	If you're in CONTROLLER mode (p. 36), operating the VALUE knob will transmit the value of a specific parameter.	p. 46

UTILITY mode

UTILITY

What is UTILITY mode?

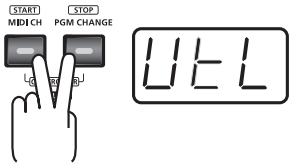
This is the mode in which you assign the control messages you want to use, and make settings for the A-500S itself.

In UTILITY mode, you use the keyboard to choose the function you want to set. In UTILITY mode, playing the keyboard will not transmit notes.

To switch the A-500S to UTILITY mode...

To switch the A-500S to UTILITY mode from PLAY mode, simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

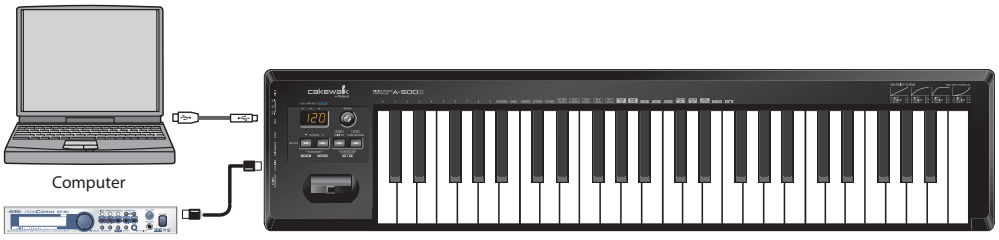


Functions in UTILITY mode

Transmit a bank select LSB message	This switches the bank. Transmit bank select LSB (CC#32) message.	BANK LSB	p. 34
Transmit a bank select MSB message	This switches the bank. Transmit bank select MSB (CC#00) message.	BANK MSB	p. 35
Continue playback from the current location	This transmits a continue message (FBh); playback that had been paused will continue from the current location.	CONT	p. 39
Transmit a poly mode on message	Sets the voice mode to poly mode.	POLY	p. 40
Transmit a mono mode on message	Sets the voice mode to mono mode.	MONO	p. 41
Transmit a portamento on message	Turns on the portamento function that creates a smooth pitch change from one note to the next (Portamento On).	PORTA ON	p. 42
Transmit a portamento off message	Turns the portamento function off.	PORTA OFF	p. 43
Transmit a GM2 system on message	Transmit a GM2 system on message.	GM2 SYS ON	p. 44
Transmit a reset message	Stop "stuck" notes or other problems with the sound on a connected MIDI sound module.	PANIC	p. 45
Make system settings	You can make system settings for the A-500S itself.	SYSTEM	p. 47

Play

PLAY



When you turn on the power, the A-500S will start up in **PLAY mode**.

→ **"What is PLAY mode?"** (p. 27)

In **PLAY mode**, playing the keyboard will transmit note messages to play the connected MIDI device.
In order to transmit MIDI messages from the A-500S, perform the following steps.

1. Set the MIDI channel the A-500S will use to transmit to the same channel on the sound module (software) is using to receive on.

Use MIDI Channel mode to set the **MIDI transmit channel**.

→ **"Setting the MIDI transmit channel"** (p. 31)

2. Select a **sound** on your **MIDI sound module**.

→ **"Selecting Sounds on a Sound Module"** (p. 32)

3. Once you have finished making settings, try playing the keyboard.

When you play the keyboard, MIDI messages are sent to the sound module (software).

* Since the A-500S does not contain a sound generator, you cannot play MIDI data using the A-500S alone.

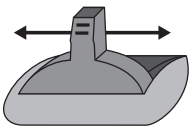
Features useful when playing

Applying pitch changes to notes (Pitch Bend)	Move the **Pitch Bend/Modulation lever** (left or right) to transmit **pitch bend** messages, and apply subtle pitch changes to notes. * The amount of pitch change ("bend range") depends on the settings of your sound module.
Modifying the sound of notes (Modulation)	Push the **Pitch Bend/Modulation lever** away from you to transmit **modulation** messages (CC#01), changing the sound in real time (usually by adding a vibrato effect). * The type of change this produces in the sound depends on the settings of your sound module.
Adding a sustain effect to notes (Hold)	If a **pedal switch** or **foot switch** (one from the DP series or BOSS FS-5U; sold separately) is connected to the rear panel HOLD jack, you can press the foot switch to make notes continue sounding even after you remove your hand from the keyboard (the Hold function). This will transmit the MIDI message hold 1 (CC#64). The hold on message (data 127) is transmitted when you press the pedal, and hold off (data 0) when you release the pedal.
Controlling the volume or timbre of the sound (Expression)	If an **expression pedal** (EV-5; sold separately) is connected to the rear panel EXPRESSION jack, you can use the pedal to control the volume or tone.
Changing octaves (Octave Shift)	You can press **OCTAVE [-]** or **OCTAVE [+]** to raise or lower the pitch range of the keyboard (the octave shift function). Press **OCTAVE [-]** once to lower the pitch range one octave. Press it once again to lower the range an additional octave. Permissible settings for this range from -4 to 5 octaves. **OCTAVE [-]** or **OCTAVE [+]** will light according to the current octave shift setting. If you simultaneously press **OCTAVE [-]** and **OCTAVE [+]**, the octave shift setting will be reset to 0, restoring the normal pitch range of the keyboard.

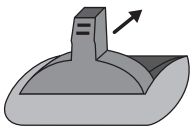
MEMO

While playing the keyboard, move the Pitch Bend/Modulation lever to the left to lower the pitch of the currently selected patch, or to the right to raise its pitch. This is known as **pitch bend**. You can also apply vibrato by gently pressing the Modulation Controller. This is known as **modulation**.
If you push the lever away from you and the same time move it to the right or left, you can apply both effects at once.

* The amount of pitch change ("bend range") depends on the settings of your sound module.



Pitch Bend



Modulation

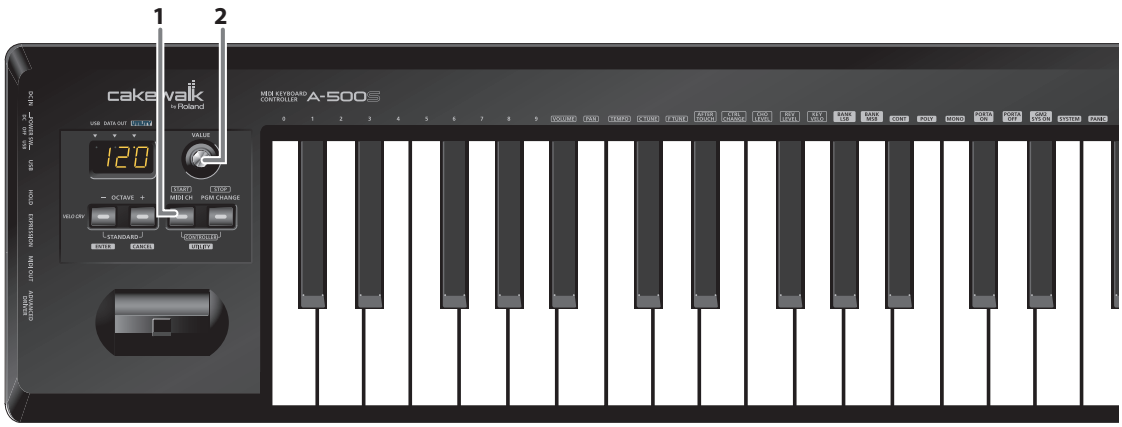
Setting the MIDI transmit channel

PLAY

To control your sound module, set the A-500S's **current channel** to the **MIDI receive channel** that's selected on your sound module.

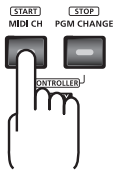
Current channel

The **current channel** is the **transmit channel** for the keyboard, Pitch Bend/Modulation lever, VALUE knob, hold pedal and expression pedal.



1. Press the **[MIDI CH]** button.

The [MIDI CH] button will light. The display will show the **current channel** setting.



2. Use the **VALUE knob** to specify the desired channel number.

Value range	1–16

The **current channel** has now been set.

MEMO In **CONTROLLER mode** (p. 36), pressing the [MIDI CH] button will transmit a Start message (FAh).

Selecting sounds on a sound module
—Transmitting program change / bank select massages

To select a sound on your MIDI sound module, transmit a program change.

To select a sound from a different bank, first transmit a bank select message that switches the bank. Then transmit a program change.

* You must transmit the bank select message before transmitting the program change message.

What is a bank?

MIDI sound modules organize their numerous sounds in various groups according to the category of sound. These groups are called "banks."

Program change messages can only select sounds within the same bank, but by using these in conjunction with bank select messages, you can select different variations of sound.

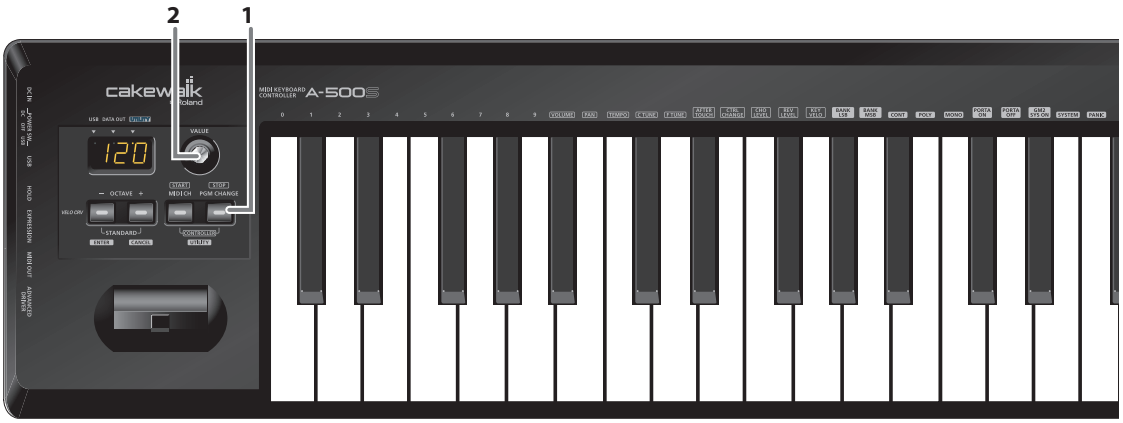
* The way in which sounds are organized will differ for each sound module. For details, refer to the owner's manual of the sound module you are using.

- **"Transmitting a program change message"** (p. 33)
- **"Transmitting a bank select LSB message"** (p. 34)
- **"Transmitting a bank select MSB message"** (p. 35)

Transmitting a program change message

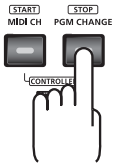
PLAY

This lets you transmit a **program change message** on the **"Current channel"** (p. 31).



1. Press the **[PGM CHANGE]** button.

The [PGM CHANGE] button will light. The display will indicate the program change that was transmitted most recently.



2. Use the **VALUE knob** to specify the program change you want to transmit.

Value range	0–127

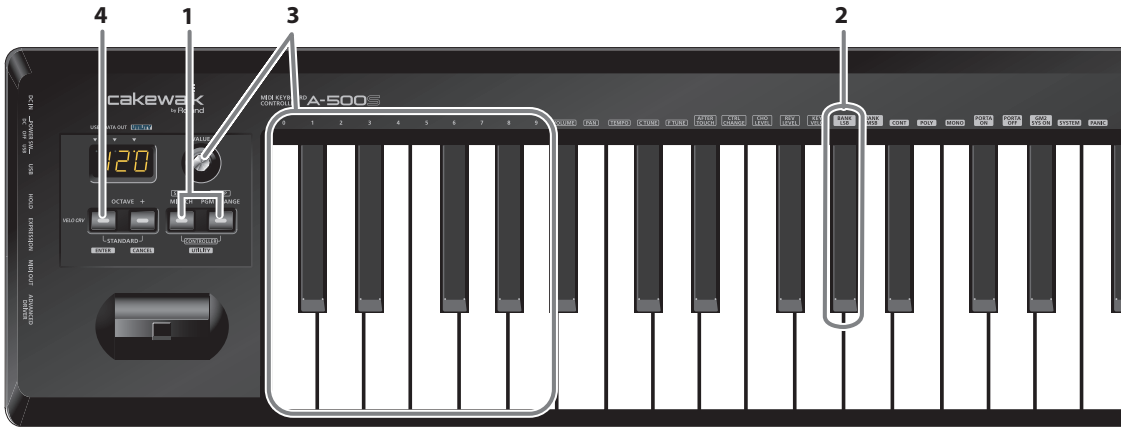
The **program change message** has now been transmitted.

MEMO In **CONTROLLER mode** (p. 36), pressing the [PGM CHANGE] button will transmit a stop message (FCh).

Transmitting a bank select LSB message

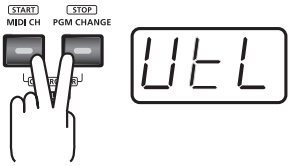
UTILITY

Here's how to transmit a **bank select LSB (#CC32) message** on the **"Current channel"** (p. 31). The **bank select MSB** and **program change message** you most recently transmitted (specified) as described in "Transmitting a bank select MSB message" (p. 35) and "Transmitting a program change message" (p. 33) will also be transmitted.



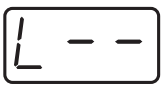
1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.



2. Press **[BANK LSB]** key.

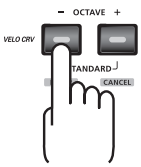
3. Use the **VALUE knob** or the **[0]**–**[9]** keys of the keyboard to specify the bank select LSB that you want to transmit.



* The -- area displays the currently set value. If it has not been set, the default setting will be displayed. Even if you change the type or mode of the MIDI message that is assigned, the default setting will be displayed. This will be lit if the value is the same as the currently set value, or will blink if the value is different.

4. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.



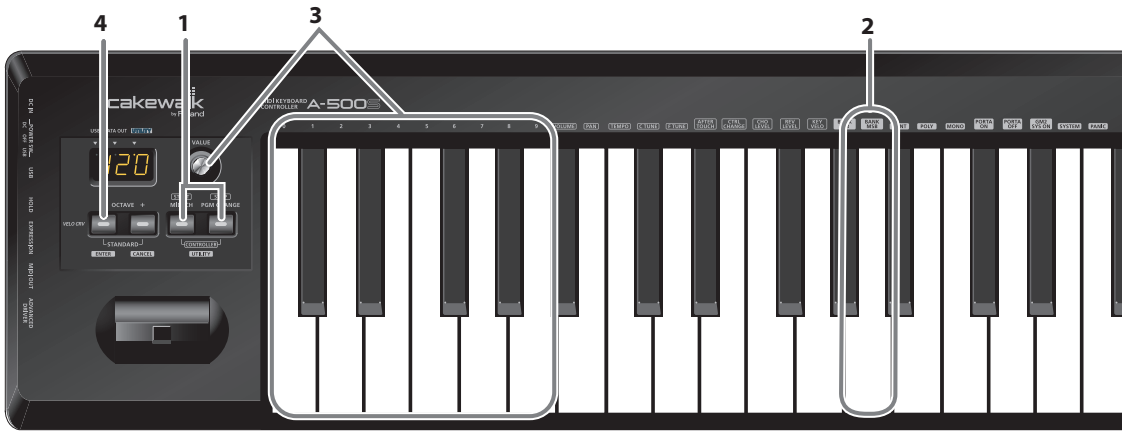
The **bank select LSB message** has now been transmitted.

Transmitting a bank select MSB message

UTILITY

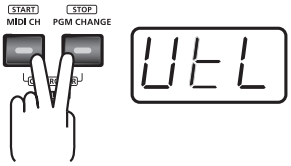
Here's how to transmit a **bank select MSB (#CC00) message** on the **"Current channel"** (p. 31).

The **bank select LSB** and **program change message** you most recently transmitted (specified) as described in "Transmitting a bank select LSB message" (p. 34) and "Transmitting a program change message" (p. 33) will also be transmitted.



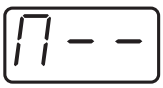
1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.



2. Press **[BANK MSB]** key.

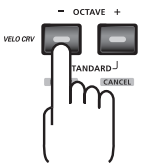
3. Use the **VALUE knob** or the **[0]**–**[9]** keys of the keyboard to specify the bank select MSB that you want to transmit.



* The -- area displays the currently set value. If it has not been set, the default setting will be displayed. Even if you change the type or mode of the MIDI message that is assigned, the default setting will be displayed. This will be lit if the value is the same as the currently set value, or will blink if the value is different.

4. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.



The **bank select MSB message** has now been transmitted.

Starting/stopping playback—Transmitting start/stop messages

By transmitting a **start message** (FAh) or **stop message** (FCh) to your sequencer or similar device, you can start or stop playback on the sequencer.

By transmitting a **continue message** (FBh), you can resume playback from the point where it was last stopped.

Use **CONTROLLER mode** to transmit **start/stop messages**.

What is CONTROLLER mode?

In this mode, the **[MIDI CH]** button, **[PGM CHANGE]** button, and **VALUE knob** are assigned different functions than in the normal PLAY mode.

	[MIDI CH] button	**[PGM CHANGE] button**	**VALUE knob**
CONTROLLER mode	Transmit a Start message	Transmit a Stop message	Transmit the specified parameter
Normal PLAY mode	Specify the MIDI transmit channel	Specify a program change	Specify a MIDI transmit channel or transmit a program change number

To switch the A-500S to CONTROLLER mode...

If you simultaneously press the **[MIDI CH]** button and the **[PGM CHANGE]** button, the **[MIDI CH]** button and **[PGM CHANGE]** button will light, and the A-500S will be in CONTROLLER mode.

If you again press the **[MIDI CH]** button and **[PGM CHANGE]** button simultaneously, the **[MIDI CH]** button and **[PGM CHANGE]** button will go dark, and the A-500S will be in Normal PLAY mode.

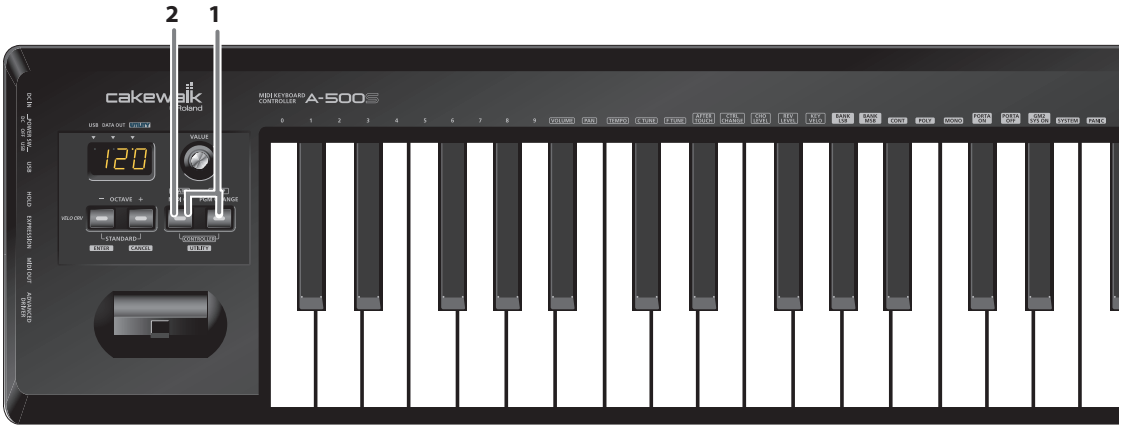
* CONTROLLER mode works only in PLAY mode. It is not available in UTILITY mode.

Use **"UTILITY mode"** (p. 28) to transmit a **continue message**.

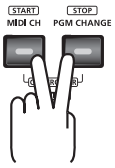
Starting playback—Transmitting a start message

PLAY CONTROLLER

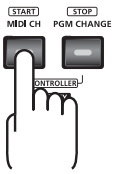
A **start message** (FAh) will be transmitted, and playback or recording will begin.



1. If you simultaneously press the **[MIDI CH]** button and the **[PGM CHANGE]** button, the **[MIDI CH]** button and **[PGM CHANGE]** button will light, and the A-500S will be in CONTROLLER mode.



2. Press the **[MIDI CH]** button.

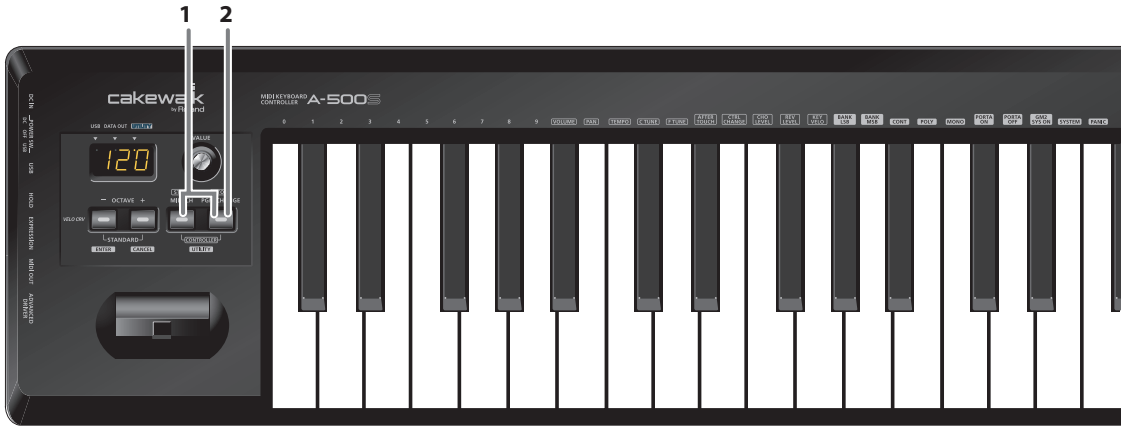


The **start message** has now been transmitted.

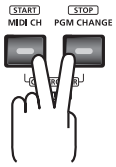
Stopping playback—Transmitting a stop message

PLAY CONTROLLER

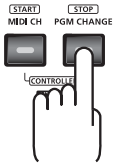
A **stop message** (FCh) will be transmitted, and playback or recording will stop.



1. If you simultaneously press the **[MIDI CH]** button and the **[PGM CHANGE]** button, the **[MIDI CH]** button and **[PGM CHANGE]** button will light, and the A-500S will be in CONTROLLER mode.



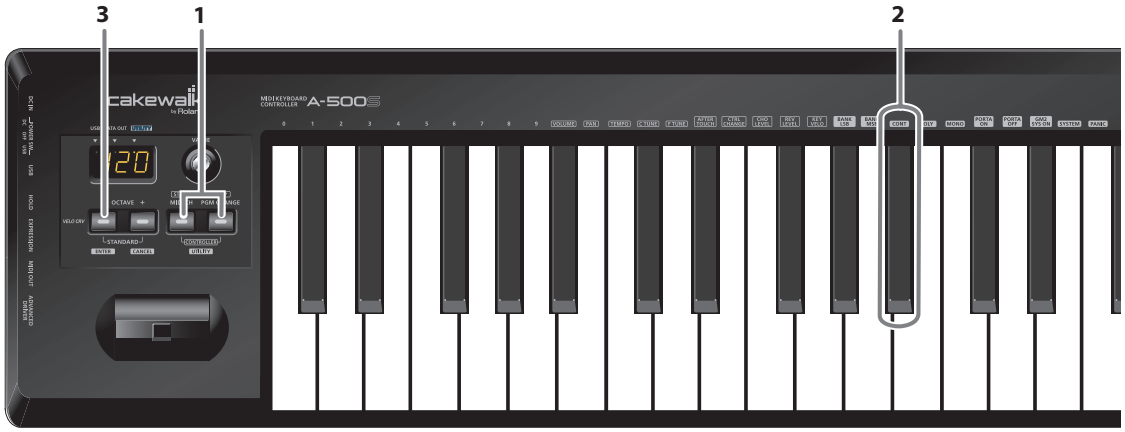
2. Press the **[PGM CHANGE]** button.



The **stop message** has now been transmitted.

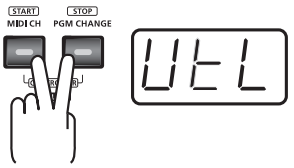
Continuing playback from the current location—Transmitting a continue message UTILITY

This transmits a **continue message** (FBh); playback that had been paused will continue from the current location.



1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

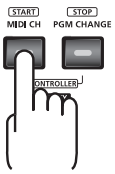


2. Press the **[CONT]** key.

The display will indicate "CNT" and blink.

3. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.



The **continue message** has now been transmitted.

Transmitting messages to an external MIDI sound module

You can transmit messages from the A-500S to an external MIDI sound module in order to control it.

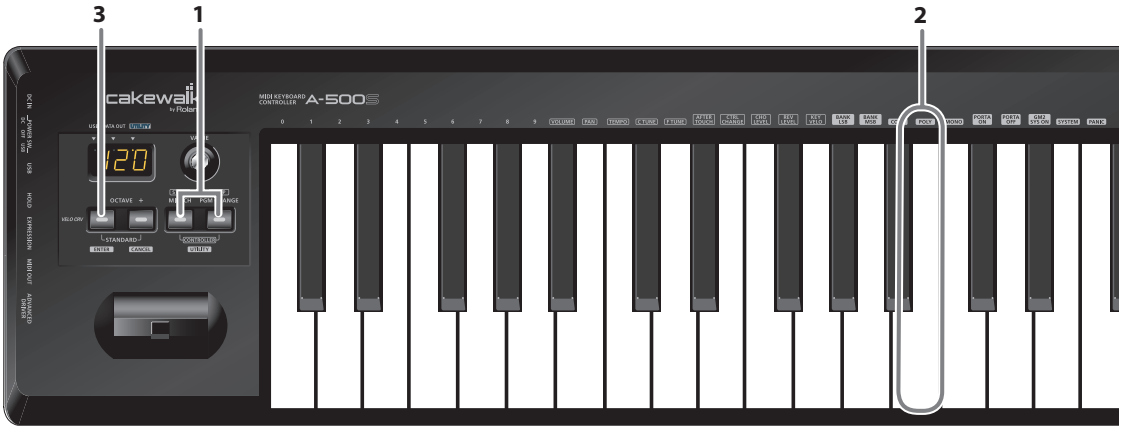
Messages	Description
POLY MODE ON	p. 40
MONO MODE ON	p. 41
PORTAMENTO ON	p. 42
PORTAMENTO OFF	p. 43
GM2 SYSTEM ON	p. 44
RESET	p. 45

Use **"UTILITY mode"** (p. 28) to transmit these messages to an external MIDI sound module.

Transmitting a poly mode on message

UTILITY

Here's how to set the voice mode of your connected MIDI sound module to Poly mode.
Poly mode allows you to play multiple notes (chords) simultaneously.



1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

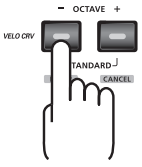
2. Press the **[POLY]** key.

The display will indicate "PLY" and blink.

3. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.

The **poly mode on message** has now been transmitted.



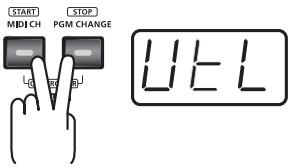
Transmitting a mono mode on message

UTILITY

Here's how to set the voice mode of your connected MIDI sound module to mono mode.
Mono mode allows you to play only single notes at a time.

1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

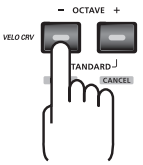


2. Press the **[MONO]** key.

The display will indicate "MNO" and blink.

3. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.

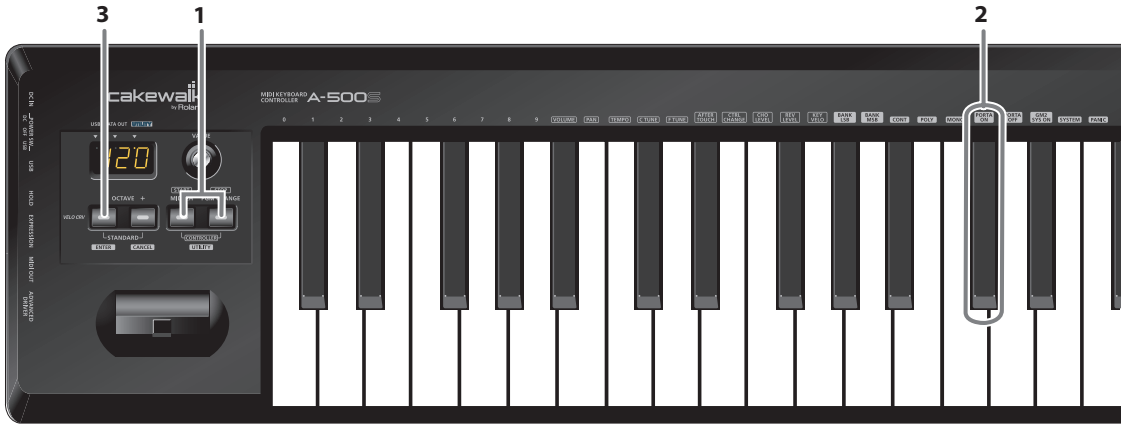


The **mono mode on message** has now been transmitted.

Transmitting a portamento on message

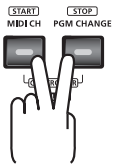
UTILITY

Turns on the portamento function that creates a smooth pitch change from one note to the next (Portamento On).



1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

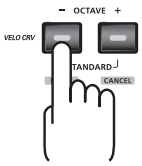


2. Press the **[PORTA ON]** key.

The display will indicate "PON" and blink.

3. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.



The **portamento on message** has now been transmitted.

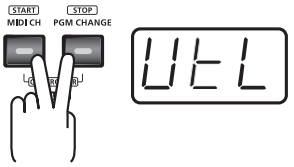
Transmitting a portamento off message

UTILITY

Turns the portamento function off.

1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

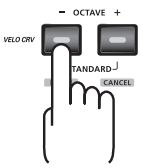


2. Press the **[PORTA OFF]** key.

The display will indicate "POF" and blink.

3. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.

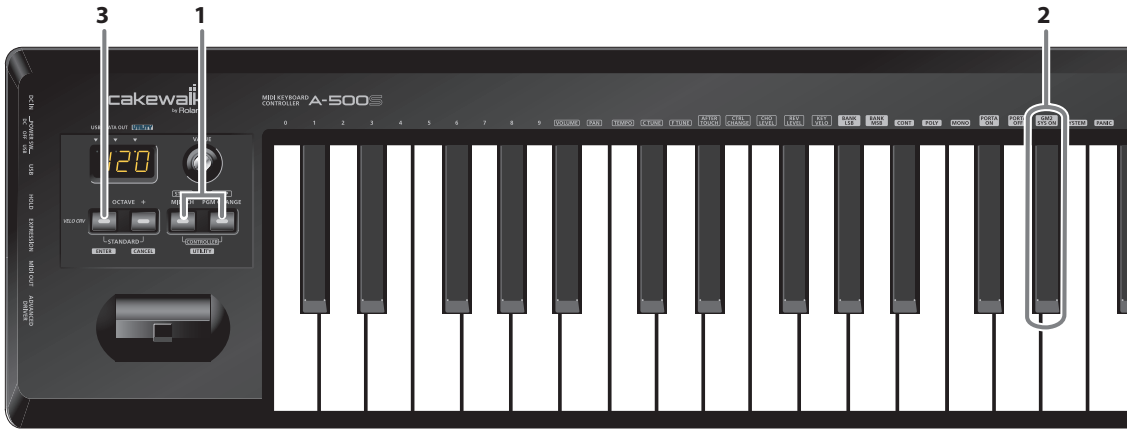


The **portamento off message** has now been transmitted.

Transmitting a GM2 system on message

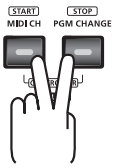
UTILITY

This lets you transmit a **GM2 system on message**.



1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

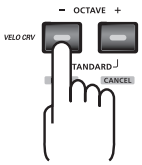


2. Press the **[GM2 SYS ON]** key.

The display will indicate "GM2" and blink.

3. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.



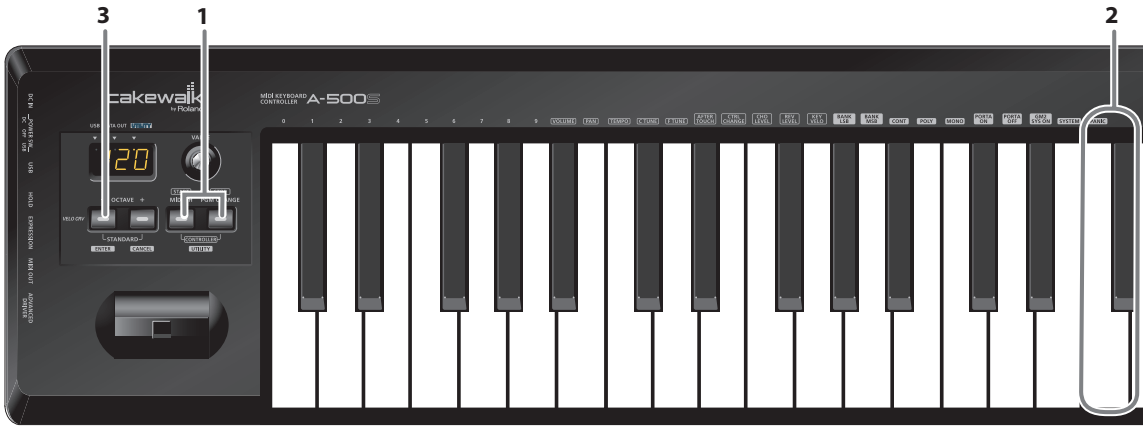
The **GM2 system on message** has now been transmitted.

Transmitting a reset message

UTILITY

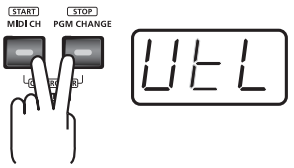
If notes on a connected MIDI sound module become "stuck," or if there is something wrong with the sound, you can execute the Panic function to solve the problem.

When you execute the panic function, **All sounds off, All notes off,** and **Reset all controllers** messages will be transmitted on all channels.



1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

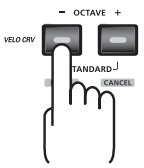


2. Press the **[PANIC]** key.

The display will indicate "PNC" and blink.

3. Press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.



The **reset message** has now been transmitted.

Transmitting the value of a specific parameter

PLAY CONTROLLER

Specified parameters

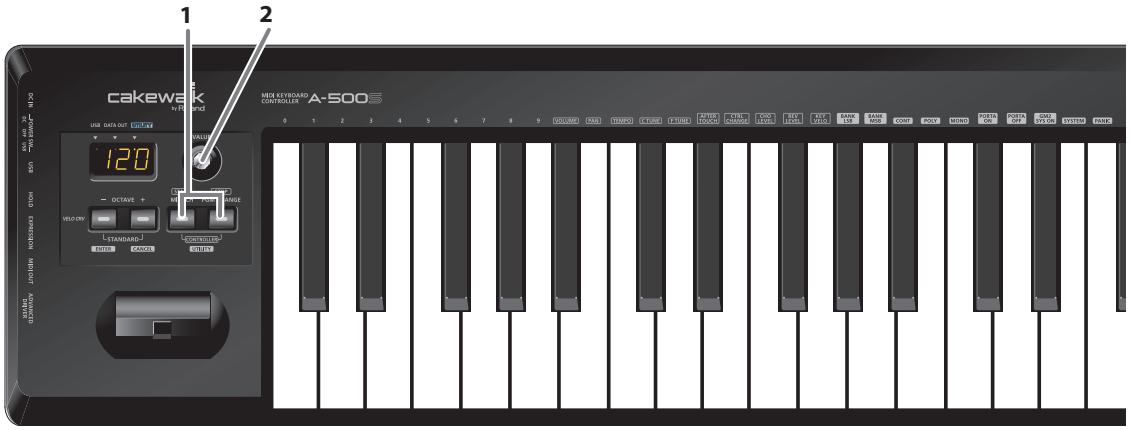
The A-500S lets you assign a specific parameter to the VALUE knob so that the value of that parameter will be transmitted when you operate the VALUE knob.

To assign a parameter

In UTILITY mode **System settings**, specify the parameter you want to assign to the VALUE knob.

→ **"System Settings"** (p. 47)

If you're in **CONTROLLER mode** (p. 36), operating the VALUE knob will transmit the value of a specific parameter.



1. If you simultaneously press the **[MIDI CH]** button and the **[PGM CHANGE]** button, the **[MIDI CH]** button and **[PGM CHANGE]** button will light, and the A-500S will be in CONTROLLER mode.

2. Operate the **VALUE knob**.

The value of the parameter you assigned will be transmitted.

System Settings

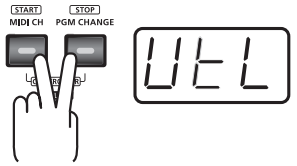
Set the system settings

UTILITY

Use **UTILITY mode** to make various SYSTEM settings for the A-500S.

1. Simultaneously hold the **[MIDI CH]** button and **[PGM CHANGE]** button down.

The display will indicate "UTL," and the A-500S enters UTILITY mode.

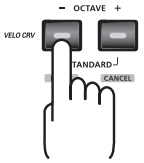


2. Press the **[SYSTEM]** key.

The display will indicate "SY0" and blink.

3. Use the **VALUE knob** or the **[0]**–**[9]** keys to specify the System setting that you want to set, and then press the **[ENTER]** button.

* The setting will be cancelled if you press another button instead of the **[ENTER]** button.



Confirm what's indicated and use the appropriate method to make the setting.

Display	Mode	Key board	Content of the setting	Default	Setting method
SY0	**F8 CLOCK ON/OFF**	**0**	Specify whether F8 Clock is to be transmitted.	OFF	p. 48
SY1	**F8 CLOCK DEFAULT TEMPO**	**1**	If "F8 CLOCK ON/OFF" is ON, specify the default value of the F8 Clock. After the power is turned on, this tempo will continue to be output until you move a controller to which TEMPO is assigned.	120	p. 48
SY2	**VELOCITY CURVE**	**2**	When you play the keyboard of the A-500S, note messages will be transmitted with a velocity value that corresponds to your playing strength. By setting the VELOCITY CURVE, you can modify the keyboard's sensitivity and the curve that is followed when the velocity value changes.	1-MEDIUM	p. 49
SY3	**KEY VELOCITY**	**3**	Specify whether the transmitted velocity value will vary according to the keyboard sensitivity and curve you selected in "VELOCITY CURVE", or will always be transmitted at a fixed value.	TOUCH	p. 50
SY4	**MIDI I/F MODE**	**4**	Specify whether the A-500S will function as a MIDI interface using its MIDI connectors.	ON	p. 50
SY5	**VALUE KNOB**	**5**	Select the parameter that is transmitted by the VALUE knob.	VOLUME	p. 51
SY6	**FACTORY RESET**	**6**	Restore all settings of the A-500S to their factory-set condition.	-	p. 53

F8 CLOCK ON / OFF (Keyboard: 0)

Perform steps 1–3 (p. 47).

4. Use the **VALUE knob** or the **[0]** or **[1]** keys to switch F8 CLOCK ON / OFF.
The display will indicate either "ON" or "OFF."

5. Press the **[ENTER]** button.

Keyboard	Setting
0	OFF
1	ON

F8 CLOCK DEFAULT TEMPO (Keyboard: 1)

Perform steps 1–3 (p. 47).

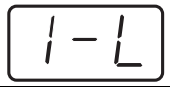
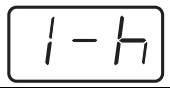
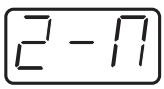
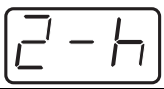
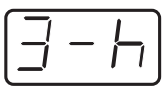
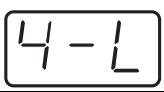
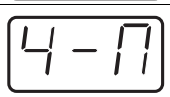
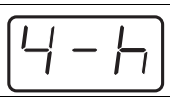
4. Use the **VALUE knob** or the **[0]**–**[9]** keys to specify F8 CLOCK DEFAULT TEMPO. (Value range 20–250)
The specified value will indicate in the display.

5. Press the **[ENTER]** button.

VELOCITY CURVE (Keyboard: 2)

Perform steps 1–3 (p. 47).

4. Use the **VALUE knob** or the **keyboard** to specify the keyboard sensitivity and curve.

Keyboard	Display	Setting	Curve	Keyboard's sensitivity
0		1-LIGHT	The standard setting. The volume will change in a natural way according to your playing strength. 1	High velocity values will be produced even if you play the keyboard softly.
1		1-MEDIUM		The keyboard sensitivity will be normal.
2		1-HEAVY		High velocity values will be produced only if you play the keyboard strongly.
3		2-LIGHT	Compared to curve **1**, the volume will change more significantly for softly played notes. 2	High velocity values will be produced even if you play the keyboard softly.
4		2-MEDIUM		The keyboard sensitivity will be normal.
5		2-HEAVY		High velocity values will be produced only if you play the keyboard strongly.
6		3-LIGHT	Variations in your playing strength will produce natural-sounding changes in volume. 3	High velocity values will be produced even if you play the keyboard softly.
7		3-MEDIUM		The keyboard sensitivity will be normal.
8		3-HEAVY		High velocity values will be produced only if you play the keyboard strongly.
9		4-LIGHT	Compared to curve **1**, the volume will change more significantly for the strongly played notes. 4	High velocity values will be produced even if you play the keyboard softly.
VOLUME		4-MEDIUM		The keyboard sensitivity will be normal.
PAN		4-HEAVY		High velocity values will be produced only if you play the keyboard strongly.

5. Press the **[ENTER]** button.

VELOCITY CURVE setting

VELO CRV

You can also access the VELOCITY CURVE setting screen by holding down the **[VELO CRV]** button while you turn on the power.

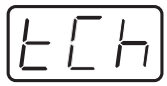
KEY VELOCITY (Keyboard: 3)

Key Velocity mode lets you specify whether the transmitted velocity value will vary according to your keyboard playing strength and the specified **"VELOCITY CURVE"** (p. 49), or will always be transmitted at a fixed value.

The A-500S detects the strength with which you play a key, and transmits the velocity value accordingly. However, if you set Key Velocity mode to a fixed value, the velocity will be transmitted at this fixed value regardless of how strongly you play the keys. You can use the Key Velocity mode to specify a fixed value if you don't want your playing dynamics to have an effect.

Perform steps 1–3 (p. 47).

4. Use the **VALUE knob** or the **keyboard** to specify the Key Velocity mode.

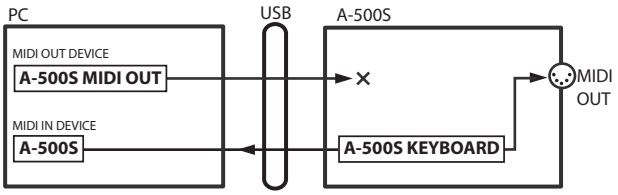
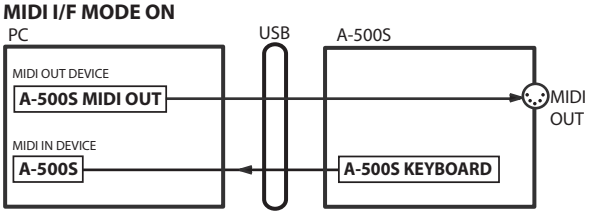
Keyboard	Display	Mode	Description
0		TOUCH	Velocity values will be transmitted according to the keyboard sensitivity and curve you selected in **"VELOCITY CURVE"** (p. 49).
1–127		Fixed value	Velocity will be transmitted at the specified value regardless of how strongly you play the keyboard.

5. Press the **[ENTER]** button.

MIDI I/F MODE (Keyboard: 4)

Perform steps 1–3 (p. 47).

4. Use the **VALUE knob** or the **[0]**–**[1]** keys to specify MIDI I/F MODE.

Keyboard	Display	Mode	Description
0		MIDI I/F MODE OFF	MIDI messages received by the A-500S are not output from the A-500S. MIDI messages from the A-500S will be sent to your computer or external MIDI device. **MIDI I/F MODE OFF** 
1		MIDI I/F MODE ON	The MIDI connectors on the A-500S will function as a MIDI interface. MIDI messages from a computer connected via USB to the A-500S will be sent to the MIDI device connected to the A-500S's MIDI OUT connector. **MIDI I/F MODE ON** 

5. Press the **[ENTER]** button.

VALUE KNOB (Keyboard: 5)

You can assign a specific parameter to the VALUE knob.

Specified parameters

The A-500S lets you assign a specific parameter to the VALUE knob so that the value of that parameter will be transmitted when you operate the VALUE knob.

To transmit the value of a specific parameter

If you're in **CONTROLLER mode** (p. 36), operating the VALUE knob will transmit the value of a specific parameter.

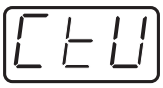
→ **"Transmitting the value of a specific parameter"** (p. 46)

* The VALUE knob setting is valid only in the CONTROLLER mode of **PLAY mode** (p. 27).

Perform steps 1–3 (p. 47).

4. Use the **VALUE knob** or the **keyboard** to specify VALUE KNOB.

List of parameters that can be assigned

Keyboard	Display	Parameter	Description
VOLUME		**VOLUME**	Assigns the VOLUME parameter to the VALUE knob. VOLUME: 0–127
PAN		**PANPOT**	Assigns the PANPOT parameter to the VALUE knob. PANPOT: 0–127
TEMPO		**TEMPO**	Assigns the tempo of the F8 Clock messages to the VALUE knob. TEMPO: 20–250
C TUNE		**COARSE TUNING**	Assigns the COARSE TUNING parameter to the VALUE knob. COARSE TUNING: 0–127
F TUNE		**FINE TUNING**	Assigns the FINE TUNING parameter to the VALUE knob. FINE TUNING: 0–127
AFTER TOUCH		**AFTERTOUCH**	Assigns the AFTERTOUCH parameter to the VALUE knob. AFTERTOUCH: 0–127
CTRL CHANGE		**CONTROL CHANGE**	Assigns the CONTROL CHANGE parameter to the VALUE knob. CONTROL CHANGE: 0–127
CHO LEVEL		**CHORUS LEVEL**	Assigns the CHORUS LEVEL parameter to the VALUE knob. CHORUS LEVEL: 0–127
REV LEVEL		**REVERB LEVEL**	Assigns the REVERB LEVEL parameter to the VALUE knob. REVERB LEVEL: 0–127
KEY VELO		**KEY VELOCITY**	Assigns the KEY VELOCITY parameter to the VALUE knob. In KEY VELOCITY MODE, the velocity value is fixed. The A-500S transmits velocity values that correspond to the force with which you play the keyboard, but if KEY VELOCITY is assigned to the VALUE knob, the fixed velocity value you specify using the VALUE knob will be transmitted regardless of how you actually play the keyboard. Use KEY VELOCITY MODE if you don't want the velocity values to be affected by how you play the keyboard. KEY VELOCITY: tch, 1–127 * If you use the VALUE knob to set the value to "tch", the transmitted velocity will correspond to the force with which you actually play the keyboard.

5. Press the **[ENTER]** button.

If you've selected "Control Change" as the parameter

6. Use the **VALUE knob** or the **keyboard** to specify the control change number.

7. Press the **[ENTER]** button.

FACTORY RESET (Keyboard: 6)

Perform steps 1–3 (p. 47).

4. The display will indicate "RST."

5. Press the **[ENTER]** button.
The display will blink "YES" and blink.
Press the **[ENTER]** button.

Appendices

Driver signing option settings (Windows XP)

Driver installation may not be possible due to your settings for "Driver Signing Options." Refer to the following, and make the appropriate settings.

1. Open the **Control Panel**, click **Performance and Maintenance**, and then click the **System** icon.
   * If you're using the Classic view, double-click **System**.
2. Click the **Hardware** tab, and then click **[Driver Signing]**.
   The **Driver Signing Options** dialog box will appear.
3. In the **Driver Signing Options** dialog box, choose **Warn** or **Ignore**, and click **[OK]**.
4. Click **[OK]** to close the **System Properties** dialog box.
5. Install the driver as described in the procedure for **"Installing the driver"** (p. 14).
   * Once you've finished installing the driver, change the driver signing options back to their original settings.

Reinstalling the driver

If a problem occurred while installing the driver, use the following procedure to reinstall it.

1. Uninstall the A-500S driver as described in **"Removing the driver"** (p. 55).
2. Install the driver once again as described in **"Driver Installation and Settings"** (p. 13).

Removing the driver

Your computer may fail to correctly recognize the A-500S if the driver could not be installed according to the specified procedure. If so, you'll need to delete the driver that was detected by mistake. Use the following procedure to remove the driver, and then install the driver once again according to the procedure given in **"Driver Installation and Settings"** (p. 13).

Windows users

* The displayed content may differ depending on your system.

1. Start up Windows with the A-500S disconnected.

* Make sure that all USB cables other than those for a USB keyboard and USB mouse (if used) are disconnected.
* Log on using a user name whose account type is computer administrator (such as Administrator).

2. Insert the included **A-500S CD-ROM** into your computer's CD-ROM drive.

3. On the CD-ROM, navigate to the following folder and double-click **Uninstal.exe**.

Windows 7	Open the folders [Driver] and then [Win7]
Windows Vista	Open the folders [Driver] and then [Vista]
Windows 7 64-bit edition	Open the folders [x64Driver] and then [Win7]
Windows Vista 64-bit edition	Open the folders [x64Driver] and then [Vista]
Windows XP	Open the folders [Driver] and then [XP]

4. A user account control dialog box will appear; click **[Yes]** or **[Continue]**.

5. The screen will indicate **"The installed A-500S Driver will be uninstalled."** Click **[OK]**.

* If any other message appears, proceed as directed by the message.

6. The screen will indicate **"Uninstallation was completed."** Click **[OK]** to restart Windows.

Macintosh users

* The displayed content may differ depending on your system.

1. Start up your Macintosh with all USB cables disconnected.

* Make sure that all USB cables other than those for a USB keyboard and USB mouse are disconnected.

2. Insert the included **A-500S CD-ROM** into the CD-ROM drive of your Macintosh.

3. Double-click one of the following icons on the CD-ROM to start up the uninstaller.

Mac OS X 10.6 or later	[A500S_Uninstaller.pkg] (/Driver/10.6)
Mac OS X 10.5 or earlier	[A500S_Uninstaller.pkg] (/Driver/10.4_10.5)

4. The screen will indicate **"This uninstalls A-500S driver from this Macintosh"**. Click **[Uninstall]**.

* If any other message appears, proceed as directed by the message.

5. The screen will indicate **"Are you sure to uninstall the driver?"** Click **[OK]**.

6. An **Authenticate** dialog box or the dialog that asks to type your password will appear. Enter the password and click **[OK]**.

7. The screen will indicate **"Uninstallation is completed."** Click **[Restart]** to restart your Macintosh.

* It may take some time for the Macintosh to restart.

Power management settings

If you experience problems such as interrupted notes or dropouts in the sound, you may be able to solve the problem by changing your computer's power management settings.

Windows 7 users

1. Open the **Control Panel,** click **System and Security**, and then click **Power Options**.
   * If you're using an icon display, double-click the **Power Options** icon.
2. In **Select a power plan,** choose **High performance**.
   If you don't see **High performance**, click **Show additional plans**.
3. In the **High performance** area, click **Change plan settings**.
4. Click **Change advanced power settings**.
5. In **Power Options Advanced Settings**, click the **"+"** symbol for **Hard Disk**, and click the **"+"** symbol for **Turn off hard disk after** to open it.
6. Click **Setting (Minutes)**, and click the down arrow to change the setting to **Never**.
7. Click **[OK]** to close the **Power Options** window.
8. Close the **Edit Plan Settings** screen.

Windows Vista users

1. Open the **Control Panel**, click **System and Maintenance**, and then click **Power Options**.
   * If you're using the Classic view, double-click the **Power Options** icon.
2. In **Select a power plan**, choose **High performance**.
3. In the **High performance** area, click **Change plan settings**.
4. Click **Change advanced power settings**.
5. In **Power Options Advanced Settings**, click the **"+"** symbol for **Hard Disk**, and click the **"+"** symbol for **Turn off hard disk after** to open it.
6. Click **Setting (Minutes)**, and click the down arrow to change the setting to **Never**.

7. Click **[OK]** to close the **Power Options** window.

8. Close the **Edit Plan Settings** screen.

Windows XP users

1. Open the **Control Panel**, click **Performance and Maintenance**, and click **Power Options**.
   * If you're using the Classic view, double-click the **Power Options** icon.

2. Click the **Power Schemes** tab, and in the **Power Schemes** field, select **Always On**.

3. Click **[OK]** to close **Power Options Properties**.

Macintosh users

1. In **System Preferences**, click **Energy Saver**.

2. Click **Options**.

3. In the **Processor Performance** field, choose **Highest**.
   * On some Macintosh it may not be possible to set the **"Processor Performance."**

System “Performance” settings (Windows)

You may be able to solve the problem by changing the “Performance” setting of the system as described below.

Windows 7 users

1. Open the **Control Panel**, click **System and Security** and click **System**.
   If you’re using an icon display, double-click the **System** icon.

2. At the left, click **Advanced system settings**.

3. A User Account Control dialog box will appear; click **[Yes]**.
   * If you’re asked to enter an administrator password, log on to Windows as a user whose account type is administrator, and make the setting again.

4. Click **Performance [Settings]**, and click the [**Advanced]** tab.

5. Choose **Background services** and click **[OK]**.

6. Click **[OK]** to close **System Properties.**

Windows Vista users

1. Open the **Control Panel**, click **System and Maintenance**, and click **System**.
   * If you’re using the Classic view, double-click the **System** icon.

2. In the list of **tasks** shown at the left, click **Advanced System Settings**.

3. A User Account Control dialog box will appear; click **[Continue]**.
   * If you’re asked to enter an administrator password, log on to Windows as a user whose account type is administrator, and make the setting again.

4. Click **Performance [Settings]**, and click the **Advanced** tab.

5. Choose **Background services** and click **[OK]**.

6. Click **[OK]** to close **System Properties**.

Windows XP users

1. Open the **Control Panel**, click **Performance and Maintenance**, and double-click **System**.
   * If you're using the Classic view, double-click the **System** icon.
2. Click the **Advanced** tab, and click **Performance [Settings]**.
3. Click the **Advanced** tab.
4. Choose **Background services**, and click **[OK]**.
5. Click **[OK]** to close **System Properties**.

About standard driver mode (Windows XP)

Use this mode if you want to use the standard driver provided by your operating system.

* This setting can be used only when running Windows XP.

Installing the standard driver

1. Start up your computer with the A-500S disconnected.

* Disconnect all USB cables other than those for a USB keyboard and USB mouse (if used).

2. Close any software that is running.

3. Set the A-500S's [ADVANCED DRIVER] switch to **OFF**.

4. Set the A-500S's power switch to the **OFF** position.

5. Connect the A-500S to your computer.

6. Set the A-500S's power switch to the **USB** position.
The driver will be installed automatically.

Input/output device settings

In order to use the A-500S with your software, you'll need to choose the A-500S as the MIDI input/output device.
For details on how to make this setting, refer to the documentation of your software.

MIDI output device	USB audio device
MIDI input device	USB audio device

* For details on settings for using the A-500S with Windows Media Player, refer to **"Input/output device settings"** (p. 16), and make the MIDI input/output settings as directed.

Troubleshooting

If you experience problems, read this chapter first. It contains information that will help you solve the problem.

* For help with Windows or Macintosh operation, refer to the documentation for your computer or operating system.

Problems when installing the driver

Can't start up the installer

Is the CD-ROM inserted correctly in your CD-ROM drive?

Make sure that the CD-ROM is correctly inserted in the CD-ROM drive.

Could the CD-ROM itself or the lens of your CD-ROM drive be dirty?

The installer may not operate correctly if the CD-ROM or the lens of your CD-ROM drive is dirty. Use a commercially available CD cleaner or lens cleaner to clean the disc or lens.

Are you attempting to install from a networked CD-ROM drive?

The driver cannot be installed from a CD-ROM drive on the network.

A warning or error appears during the installation (Windows)

Could you have connected the A-500S to your computer before installing the driver?

If you connect the A-500S to your computer before installing the driver, an error message may appear when you begin the installation.

Uninstall the A-500S driver as described in **"Removing the driver"** (p. 55), and then install the A-500S driver once again as described in **"Driver Installation and Settings"** (p. 13).

Are there any devices labeled "Other," "Unknown," or "?/!/X" in the Device Manager?

If driver installation was not completed successfully, the partially installed driver may remain in an incomplete state.

Uninstall the A-500S driver as described in **"Removing the driver"** (p. 55), and then install the A-500S once again as described in **"Driver Installation and Settings"** (p. 13).

Can't install the driver according to the procedure

Did you log on to Windows with the appropriate user privileges?

You must log onto Windows using one of the following user names.

- A user name belonging to the Administrators group, such as Administrator
- A user name whose account type is Computer Administrator

* For details, ask the system administrator for your computer.

In some cases, you may be unable to install the driver because of the "Driver signing option" settings.

Refer to **"Driver signing option settings (Windows XP)"** (p. 54) and make the appropriate settings.

Could other software be running, perhaps in the background (such as anti-virus software)?

The installation may not occur correctly if other software is running. Be sure to close all other software before you perform the installation.

Installation is not successfully completed when you connect the A-500S

Could the A-500S's [ADVANCED DRIVER] switch be OFF?

Turn the A-500S's [ADVANCED DRIVER] switch **ON**, and install the driver once again.

After you connect the A-500S, it may take several tens of seconds or several minutes before it is recognized by your computer.

This is not a malfunction.

Please wait until the Found New Hardware Wizard appears.

Is the A-500S connected?

Make sure that the A-500S is correctly connected to your computer.

Could your computer be operating on its battery?

Operation may be unstable if your computer is operating on battery power.

Please use your computer with its power supply connected.

Could you be using a bus-powered USB hub (a hub that does not require a power supply)?

The A-500S cannot be used with a bus-powered USB hub (a hub that does not need a separate power supply). Use it with a self-powered USB hub (a hub that has an internal power supply or AC adaptor).

Could a USB device other than a mouse or keyboard be connected?

Disconnect all USB devices (other than a mouse and keyboard, if used) from your computer before performing the installation.

Check the power management settings of your computer.

Your computer's power management settings may be limiting the power that is supplied to USB.

Take a look at your computer's power management settings.

→ **"Power management settings"** (p. 57)

Does your computer meet the requirements of the USB specification?

Operation may be unstable if your computer does not meet the electrical requirements of the USB specification.

In this case, you may be able to solve the problem by connecting a self-powered USB hub (a USB hub that has an internal power supply or an AC adaptor).

"Found New Hardware Wizard" appears even though you've installed the driver (Windows XP)

Could you have connected the A-500S to a different USB connector than the one you used when installing the driver?

If your computer or USB hub has two or more USB connectors, connecting the A-500S to a different USB connector may cause your computer to ask for the driver file even though the driver has already been installed.

This behavior does not indicate a malfunction.

Install the driver as described in **step 10 of Installing the driver** (p. 18).

A number such as "2-" appears at the beginning of the device name (Windows)

Could you have connected the A-500S to a different USB port?

If you connect the A-500S to a different USB port, some operating systems may automatically add a number to the beginning of the device name, but this should not be a problem when using the A-500S. If you want to return to the device name that does not have this number, you can either connect the A-500S to the same USB port as when you installed it, or install the driver once again.

→ **"Reinstalling the driver"** (p. 54)

Problems with settings

Can't select/use the A-500S within software or in system settings

Could the A-500S be in use by other software?

Close all software you currently have running. Next, switch off the A-500S's power, then turn it back on again.

If this does not solve the problem, reinstall the driver.

→ **"Reinstalling the driver"** (p. 54)

Is the driver installed correctly?

Driver installation may have failed. Please reinstall the driver.

→ **"Reinstalling the driver"** (p. 54)

Is the A-500S device name shown?

If the device name is not displayed, it may be that the driver installation failed. Please reinstall the driver.

→ **"Reinstalling the driver"** (p. 54)

Could the computer to which the A-500S is connected have entered standby (suspend) mode, hibernate mode, or sleep mode?

Close all software that's using the A-500S. Next, switch off the A-500S's power, then turn it back on again.

If this does not solve the problem, restart your computer.

Could you have disconnected and reconnected the USB cable while using the A-500S?

Close all software that's using the A-500S. Next, switch off the A-500S's power, then turn it back on again.

If this does not solve the problem, restart your computer.

Could the A-500S have been connected when the computer started up?

On some computers, the A-500S may be unusable if it is already connected when the computer starts up.

Start up your computer, and then connect the A-500S.

Are you using the Media Player included with Windows?

On Windows 7 or Windows Vista, the A-500S's MIDI device cannot be selected by Media Player.

Problems when playing

The display indicates “Lo”

When the batteries run low, the display will indicate “Lo.” If this message appears, replace the batteries as soon as possible.

Replacing the batteries will not erase the contents of SYSTEM settings (p. 47).

Playback contains clicks, dropouts, or other problems

Check the power management settings

You may be able to eliminate clicks and pops by changing your system’s power management settings.

→ **“Power management settings”** (p. 57)

Try updating the driver of your display adaptor (Windows)

You may be able to eliminate clicks and pops by updating the driver for the display adaptor installed in your computer.

Have you set the system’s “Performance” setting? (Windows)

You may be able to solve the problem by changing the “Performance” setting of the system.

→ **“System “Performance” settings (Windows)”** (p. 59)

Could other software programs be running?

Close software that you’re not using.

If the window of a Windows program has been closed but it is still shown in the taskbar, that program is still running. Close all unneeded software that’s shown in the taskbar.

Have you tried Windows Update or Microsoft Update? (Windows)

Try using Windows Update or Microsoft Update (provided by the Microsoft Corporation) to update your system to the latest version.

Try disabling the LAN

In your computer’s Device Manager, try disabling LAN (wired/wireless).

If this eliminates the clicks and pops, it may be that updating your LAN driver or BIOS may solve the problem. Check whether updated software is available.

Could you have connected the A-500S to a USB hub?

Try connecting the A-500S directly to a USB connector on your computer.

Are you using the included USB cable?

You must use the included USB cable when using the A-500S. Some commercially available USB cables do not meet the requirements of the USB standard, and this may prevent the A-500S from operating correctly.

Could you have updated the Mac OS X software while A-500S was connected?

It has been found that clicks or pops can occur if you performed a Mac OS X software update while the A-500S was connected. If so, install the driver once again.

Can't play

Was the driver installed correctly?

Driver installation may have failed. Reinstall the driver.

→ **"Reinstalling the driver"** (p. 54)

Did you make input/output device settings for your software?

Refer to the owner's manual of your software and to the following pages, and select the A-500S as the input/output device.

- Windows 7/Windows Vista: → **"Input/output device settings"** (p. 16)
- Windows XP: → **"Input/output device settings"** (p. 19)
- Mac OSX: → **"Input/output device settings"** (p. 21)

Could the A-500S be in use by other software?

Close all software you currently have running. Next, switch off the A-500S's power, then turn it back on again.

If this does not solve the problem, reinstall the driver.

→ **"Reinstalling the driver"** (p. 54)

Could the computer to which the A-500S is connected have entered standby (suspend) mode, hibernate mode, or sleep mode?

Close all software that's using the A-500S. Next, switch off the A-500S's power, then turn it back on again.

If this does not solve the problem, restart your computer.

Could you have disconnected and reconnected the USB cable while using the A-500S?

Close all software that's using the A-500S. Next, switch off the A-500S's power, then turn it back on again.

If this does not solve the problem, restart your computer.

Could the A-500S have been connected when the computer started up?

On some computers, the A-500S may be unusable if it is already connected when the computer starts up.

Start up your computer, and then connect the A-500S.

There is a time lag between playing the keyboard and hearing the software synthesizer

A software synthesizer produces its sounds via the sound card of your computer. There will be a time lag ("latency") before the sound of the software synthesizer can be heard as actual sound from the sound card.

Regardless of the combination of software synthesizer and sound card, there will always be some latency, but by using the appropriate combination of software and sound card together with the correct settings, it is often possible to shorten latency to the point that it causes no problems in practice.

In general, the following settings will be effective in shortening the latency.

- Decrease the audio buffer size of your software
- Decrease the buffer size of your sound card

For details on these settings, refer to the owner's manual for your software and sound card.

MIDI Implementation

Model: A-500S Version 1.00 2009.08.1

1. Transmit data

■Channel voice messages

● Note off

Status	2nd byte	3rd byte
9nH	kkH	00H

n = MIDI channel number: 0H – FH (Ch.1 – 16)
kk = note number: 00H – 7FH (0 – 127)
* Transmitted when you release a key in Play mode.

● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
kk = note number: 00H – 7FH (0 – 127)
vv = note on velocity: 01H – 7FH (1 – 127)
* Transmitted when you push a key in Play mode.

● Control change

Status	2nd byte	3rd byte
BnH	ccH	vvH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
cc = controller number: 00H – 77H (0 – 119)
vv = control value: 00H – 7FH (0 – 127)

❍ Bank Select (Controller number 0, 32)

Status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
mm = Bank number MSB: 00H – 7FH
ll = Bank number LSB: 00H – 7FH

❍ Modulation (Controller number 1)

Status	2nd byte	3rd byte
BnH	01H	vvH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
vv = Modulation depth: 00H – 7FH (0 – 127)
* Transmitted when you press the Modulation Controller in Play mode.

❍ RPN MSB/LSB (Controller number 100, 101)

Status	2nd byte	3rd byte
BnH	65H	mmH
BnH	64H	llH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
mm =upper byte of parameter number specified by RPN
ll = lower byte of parameter number specified by RPN

RPN		Data entry		
MSB	LSB	MSB	LSB	Explanation
00H	01H	mmH		Master Fune Tuning mm: 00H-7FH
00H	02H	mmH		Master Coarse Tuning mm: 00H-7FH

● Program change

Status	2nd byte
CnH	ppH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
pp = Program number: 00H – 7FH (prog. 1 – prog. 128)

● Channel pressure

Status	2nd byte
DnH	vvH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
vv = Channel pressure: 00H – 7FH (0 – 127)

● Pitch bend change

Status	2nd byte	3rd byte
EnH	llH	mmH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
mm, ll = Pitch Bend value: 00 00H – 40 00H – 7FH 7FH (-8192 – 0 – +8191)
* Transmitted by rightward/leftward operation of the PITCH Bender in Play mode.

■Channel mode messages

In addition to the channel mode messages that can be transmitted in Panic, the A-500S lets you assign any channel voice message to the VALUE knob and transmit it.

● Channel mode messages

Status	2nd byte	3rd byte
BnH	ccH	vvH

n = MIDI channel number: 0H – FH (Ch.1 – 16)
cc = controller number: 78H – 7FH (120 – 127)
vv = control value: 00H – 7FH (0 – 127)

❍ All sounds off (Controller number 120)

Status	2nd byte	3rd byte
BnH	78H	00H

n = MIDI channel number: 0H – FH (Ch.1 – 16)
* Transmitted in Panic.

❍ Reset all controllers (Controller number 121)

Status	2nd byte	3rd byte
BnH	79H	00H

n = MIDI channel number: 0H – FH (Ch.1 – 16)
* Transmitted in Panic.

❍ All notes off (Controller number 123)

Status	2nd byte	3rd byte
BnH	7BH	00H

n = MIDI channel number: 0H – FH (Ch.1 – 16)
* Transmitted in Panic.

■System realtime message

In addition to the Active Sensing messages that are transmitted constantly, the A-500S allows you to assign the following system realtime messages (other than Active Sensing) to any controller and transmit them.

● Timing Clock

Status
F8H
* Transmitted if the System setting F8 CLOCK is ON.

● Start

Status
FAH

● Continue

Status
FBH

● Stop

Status
FCH

● Active sensing

Status
FEH
* Transmitted at intervals of approximately 250 ms.

● System reset

Status
FFH

2. Supplementary material

● Decimal and Hexadecimal table

(An "H" is appended to the end of numbers in hexadecimal notation.)

In MIDI documentation, data values and addresses/sizes of Exclusive messages, etc. are expressed as hexadecimal values for each 7 bits.
The following table shows how these correspond to decimal numbers.

Dec.	Hex.	Dec.	Hex.	Dec.	Hex.	Dec.	Hex.
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

* The decimal expression of the MIDI channel, program change, etc., is one greater than the decimal value shown in the table above.
* The hexadecimal expression for each 7 bits allows a maximum of 128 steps (0–127) to be expressed by one byte of data. Multiple bytes are used if the data requires greater resolution than this. For example, a value expressed by two 7-bit bytes "aa" and "bbH" would be aa x 128 + bb.
* In the case of signed (+/-) data, 00H = -64, 40H = +/-0, and 7FH = +63; i.e., a value 64 less than the decimal value shown in the above table is used. In the case of a two-byte value, 00 00H = -8192, 40 00 = +/-0, and 7F 7F = +8191. For example, a value of "aa" and "bbH" would have a decimal expression of aa bbH - 40 00H = aa x 128 + bb - 64 x 128.
* In the case of data indicated as "use nibble data," hexadecimal expression in 4-bit units is used. A nibble-expressed value of the two bytes 0a and 0bH would have a value of a x 16 + b.

<Example1>

What is the decimal expression of 5AH?
From the preceding table, 5AH = 90.

<Example2>

What is the decimal expression of the 7-bit hexadecimal value 12 34H?
From the preceding table, 12H = 18, and 34H = 52.
Thus, this is 18 x 128 + 52 = 2356

<Example3>

What is the decimal expression of the nibble-expressed value 0A 03 09 0D?
From the preceding table, 0AH = 10, 03H = 3, 09H = 9, and 0DH = 13.
Thus, this is ((10 x 16 + 3) x 16 + 9) x 16 + 13 = 41885

<Example4>

What is the nibble-expressed value of decimal 1258?
1258 ÷ 16 = 78 (quotient) ... 10 (remainder)
78 ÷ 16 = 4 (quotient) ... 14 (remainder)
4 ÷ 16 = 0 (quotient) ... 4 (remainder)
From the preceding table, 0 = 00H, 4 = 04H, 14 = 0EH, 10 = 0HA.
Thus, the nibble-expressed value is 00 04 0E 0AH

MIDI KEYBOARD CONTROLLER

Date : Aug. 01, 2009

Model: A-500S

MIDI Implementation Chart

Version : 1.00

Function...		Transmitted	Recognized	Remarks
Basic	Default	1	X	
Channel	Changed	1–16	X	
Mode	Default	Mode 3	X	
	Messages	OMNI ON, MONO, POLY	X	
	Altered	**********	X	
Note Number :	True Voice	0–127 **********	X X	
Velocity	Note On	O (9n v=1–127)	X	
	Note Off	O (9n v=0)	X	
After Touch	Key's	X	X	
	Channel's	O	X	
Pitch Bend		O	X	
Control Change	0-119	O	X	
Program Change	: True Number	O (0–127) **********	X X	
System Exclusive		O *1	X	
System Common	: Song Position	X	X	
	: Song Select	X	X	
	: Tune Request	X	X	
System Real Time	: Clock	O	X	
	: Commands	O	X	
Aux Messages	: All Sound Off	O *2 (120)	X	
	: Reset All Controllers	O *2 (121)	X	
	: Local On/Off	X	X	
	: All Notes Off	O *2 (123)	X	
	: Active Sensing	O	X	
	: System Reset	O	X	
Notes		* 1 GM2 SYSTEM ON only. * 2 When PANIC is transmitted.		

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

Main Specifications

A-500S: MIDI KEYBOARD CONTROLLER

●Keyboard

49 keys (with velocity)

●Controllers

MIDI Channel Button
Program Change Button
OCTAVE Shift [+] [-] Buttons
Pitch Bend/Modulation Lever
VALUE knob

●Display

7 segments, 3 characters (LED)
Power indicator

●Side Panel

Power Switch (USB BUS/OFF/DC IN)
ADVANCED DRIVER Switch (ON/OFF)

●Connectors

Hold Pedal Jack
Expression Pedal Jack
MIDI OUT Connector
USB Connector
DC IN Jack

●Power Supply

DC 9 V (sold separately, AC Adaptor),
USB Bus Power,
Dry battery LR6 (AA) type (alkaline) x 4

●Current Draw

150 mA
Expected battery life under continuous use:
Alkaline: 10 hours

* This figure will vary depending on the actual conditions of use.

●Dimensions

833 (W) x 183.8 (D) x 84 (H) mm
32-13/16 (W) x 7-1/4 (D) x 3-5/16 (H) inches

●Weight

2.7 kg
6 lbs

●Accessories

A-500S CD-ROM
Cakewalk Production Plus Pack DVD-ROM
USB Cable
Owner's Manual
Cakewalk Production Plus Pack installation guide
License agreement

●Options

AC Adaptor: (Please contact the retailer from whom you purchased the product, or the nearest Roland Service Center.)
Pedal Switch: DP series
Expression Pedal: EV-5

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

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MEMO

MEMO

For EU Countries

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PT Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.

NL Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.

DK Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.

NO Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.

SE Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.

FI Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.

HU Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.

PL Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.

CZ Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.

SK Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhadzovať spolu s domovým odpadom.

EE See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.

LT Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinti produktai neturi būti išmetami kartu su buitinėmis atliekomis.

LV Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.

SI Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinjskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinjskimi odpadki.

GR Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

For China

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环保使用期限

此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。

环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。

不当的使用，将会导致有害物质泄漏的危险。

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
外壳（壳体）	×	○	○	○	○	○
电子部件（印刷电路板等）	×	○	×	○	○	○
附件（电源线、交流适配器等）	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

因根据现有的技术水平，还没有什么物质能够代替它。

For the U.K.

WARNING: THIS APPARATUS MUST BE EARTHED
IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.
GREEN-AND-YELLOW: EARTH, BLUE: NEUTRAL, BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

For EU Countries

CE

This product complies with the requirements of EMC Directive 2004/108/EC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

For C.A. US (Proposition 65)

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

For the USA

DECLARATION OF CONFORMITY Compliance Information Statement

Model Name :	A-500S
Type of Equipment :	MIDI Keyboard
Responsible Party :	Cakewalk, Inc.
Address :	268 Summer Street, Boston, MA 02210
Telephone :	(617) 423-9004

cakewalk
by Roland

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